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SPRIT OF THE AGRICULTURAL JOURNALS OF THE DAY.

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No. 1

TO OUR PATRONS.

In issuing the first number of our second volume, new series, of the *American Farmer*, we seize the occasion to tender the homage of our thanks to our numerous friends who so nobly volunteered their services to augment our subscription list. Such disinterested testimonials of kind feelings towards us we shall ever cherish as among the green spots of our life; nor will the recollection of them fail to arm us with energy in our future endeavors to make our pages the safe reflectors of the science and practice of Agriculture. While we indulge in the feelings of becoming pride that it is the oldest agricultural journal in the country—that it is the pioneer in the noble work of improvement—that it gave the first impetus to those onward movements which have added so much to the value of landed property—we shall be equally mindful to sustain the high character it attained under the able conduct of its gifted and accomplished founder—and, therefore, though we are averse from making professions, we may be permitted to say, that no exertions of mental or mechanical skill shall be wanting, to impart to it that interest which is calculated to make it a welcome visitor at the homesteads of our subscribers.

We feel peculiarly grateful to those of our friends and patrons who have so promptly responded to our call for a speedy renewal of their subscriptions, and we flatter ourselves that on the reception of this No. those who have not done so already, will follow so laudable an example.

THE RIGHT SPIRIT—A letter to the publisher, from a gentleman of Washington co. Md. enclosing \$10, for 13 copies of the second volume of the "*American Farmer*, says:

"I am anxious that the farmers in this neighborhood should become more enlightened upon the science of agriculture, and as they will not consent to subscribe as readily as I should like, I have determined to draw upon my own pocket, hoping that at the end of the year they will be so much pleased with your most excellent paper, as to become subscribers."

WORK FOR JULY.

Although the labors of the harvest fields have been gotten through with in a very large region of our vast and far stretching land, still, owing to our varied degrees of longitude, and diverse climates, in a still larger region the harvest has not yet commenced. Therefore, it is our province to admonish our brethren to prepare at once for that important branch of rural economy. *All should forthwith hunt up all their tools, and implements, and have them put in the best possible condition for doing the most effective service. Suffer no part of the necessary preparations to go unattended to, but let everything be in readiness to dash into the hopeful work with strong force, well-strung nerves, and willing hearts.* And as the labors of cutting, and of securing grain from the weather, is as exhausting to the hands employed, as its profits are essential to the pecuniary well-being of the master and employer, it should be the pleasure as it certainly is the interest of the latter, to make ample provision to secure comfort to the former while they may be engaged in their arduous toils. Attention of this kind can scarcely fail to inspire the reapers with those feelings of gratitude which, as a necessary consequence, beget an *esprit du corps*. and make men labor with increased energy and faithfulness; for however potential they may be in muscular vigor—in bodily strength—still these may be greatly accelerated in power, and strength, and endurance, when that great moral agent is present to induce them to do their work, as the sailors say, "with a will." And while we recommend these attentions to the laborer, we may be permitted to add that every master and employer should be present in his harvest field, no matter how good a manager either may have, as from experience we feel certain that such presence eminently tends to increase not only the quantity of labor performed, but to improve the manner of its being done—the vigilance of the one creates ability in the other. With these remarks we will proceed at once to point out some of those things which should be attended to

ON THE FARM.

Harvesting.—As this is among the first work to be done we will remark, that it is best to cut your grain before it becomes dead ripe. By thus cutting it, there is less loss from shattering, while the straw itself is much more nutritious and acceptable to the cattle; nor is this the only benefit to arise; the soil itself will be greatly advantaged, as it is well known that the abstraction of pabulum is much greater the nearer the grain approaches to ripeness. But this is not the only benefit to be derived from harvesting before the grain is fully ripe, as we are justified by experiments made in England, in stating, that wheat cut *before* being fully ripe gives, on grinding, 8 per cent more flour than that which is not cut until it is dead ripe.

Harvest Drink.—As the whiskey bottle has been ejected from our harvest fields, we will repeat our recipe of last year for a *Harvest Beverage*. Mix with 5 gallons of good cool water, fresh from the spring or well, half a gallon of Molasses, one quart of Vinegar, and 2 oz. of powdered Ginger.

This makes an agreeable and safe beverage—one which, without exciting, acts as a gently invigorating stimulant, refreshes the system, and imparts renewed energies to the muscles. Repeat it at short intervals throughout the day, and you may rely on it that your hands will get through with their work with much more comfort to themselves—and what is not an unimportant point—do more of it. See that, in addition to this beverage, they get a *snack* or *lunch* at 11 o'clock.

Cutting grass and hay making.—So soon as your timothy shall be in bloom you should cut it, as in so doing you secure a much more palatable hay for your horses, and save your soil from much exhaustion consequent upon the ripening of the seed, if you should delay the time of cutting till that shall have been perfected.

In curing it, after permitting it to remain in swarth for half a day, put it into small *cocks*;—on the morning of the second day, after the dew has become evaporated, turn over the cocks and let them remain until the afternoon, when you may remove your hay in safety to your mows, barn, or barracks, taking care in stowing it away, to sprinkle on every ton of hay a peck of salt to absorb moisture and prevent heating. Hay thus cured, besides being sweeter, more fragrant, more acceptable to the stock, is intrinsically more valuable. One great end to be looked to in the curing of hay, is, to protect it from sun and rain as much as possible, as long exposure to either deteriorates both its appearance and value.

Millet.—If your hay crop is a short one—or if you have none—and you desire to secure a supply of the next best substitute, permit us to advise you to put in a sufficient number of acres of *millet* to yield you the requisite quantity of hay—for, of a certainty, it is a most excellent substitute, and we very much doubt, whether, when the nutriment contained in the

grain is taken into the account, that it is not fully equal to the very best timothy hay. Six weeks from the time of sowing it will be fit to cut, and, as it is of such rapid growth you may very readily imagine that it requires a fertile soil. If sown in a rich, sandy loam, well manured, you may calculate upon a product, per acre, of from 3 to 4 tons. When intended to be fed as *hay*, it should be cut soon after it is in bloom, as if permitted to remain until the seeds ripen, the hay becomes harsh, and much of the seed is lost. When intended for *hay* and *grain*, it should be cut as soon as the seed on the head begins to change color.

The quantity of seed per acre is from half a bushel to three pecks.

The mode of curing the hay is the same as that we recommend for timothy. In the summer of 1836, we had seven acres in Millet, and at time of cutting, just as we had finished cocking it, a heavy rain came on, with few hours of daily intermission, for eight days. During all this time the cocks were exposed to the "pellings of the pitiless storm," but much to our surprise, when the weather cleared up, we found to our delight that our Millet without injury had been converted into a fine body of fragrant hay.

Buckwheat.—This grain may be sown as late as the 10th of the month, if wanted for grain. It will yield, say, on an average, 15 bushels to the acre—and although little used for any other purpose than for making those delicious accompaniments of the breakfast table—*Buckwheat Cakes*—the very name of which makes one's mouth water—it makes most excellent chop or meal to feed to horses, cattle and swine. For milch cows it makes a most notable *slop*—one well calculated to set the secretory organs of the udder at work.

The straw, though usually thrown away, makes a very good fodder for cattle.

Should any one desire to bring up an old field, we would advise him to plough it up and sow it in Buckwheat, the which should be ploughed in so soon as it gets into bloom.

Time of sowing for grain, any time up to the 10th inst.—quantity of seed per acre, half a bushel.

Time of sowing for ploughing in, any time up to the 20th inst.—quantity of seed per acre 1 bushel.

Fall Potatoes.—Though fall late, potatoes may be planted up to the 10th of this month, with a reasonable prospect of their ripening. But when planted so late, their growth should be accelerated by such manures as are easy of decomposition—of which they should have a generous allowance.

While upon this branch of our monthly talk we will remark, that we have seen it stated that the rot has attacked the growing crop of the present season. Prudence, therefore, would suggest to the growers of this root that they should, without delay, use preventive means. The best preventive means which suggests itself to our mind would be a mixture per acre,

of 5 Bushels ashes,
2 of Lime, and
3 of Salt,

to be thoroughly incorporated together, and sown over the potatoes, and between the rows, taking care, in the distribution of the mixture, to let the vines have a very full portion of it.

Turnips.—It is too early to sow the fall crop of Turnips, but not too early to begin to make preparations. Begin, therefore, at once to accumulate manure—and as turnips delight in a thoroughly pulverized soil, proceed immediately to plough up the ground you intend for a patch,—plough, harrow and roll it—let it remain until about the 22d instant, then manure it with good well-rotted manure in the proportion of 20 double horse cart loads to the acre—plough this deeply in, then spread a mixture of

10 bushels of powdered Bones,
20 " of Ashes, and
2 " of Salt,

per acre, harrow it in; then sow your turnip seed, harrow it in with a very light garden harrow and finish by rolling.

Before being sown, the seed should be soaked for 12 hours in fish oil, then drained and dried in plaster, ashes, or lime, as taken out of the oil to be sown.

To prevent the ravages of the Turnip fly—so soon as the plants come up, go over the ground with a mop and sprinkle fish oil over them. This done, strew a mixture of plaster, lime, Scotch snuff and flour of sulphur over them. Repeat this each morning until the plants get into rough leaf. A bushel of plaster, 1 of lime, 1 lb. Scotch snuff and 2 lbs. of flour of sulphur, intimately mixed together, will be sufficient for an acre—and we feel certain, that, if our recommendation is strictly followed, that neither the Fly nor Flea will molest the young plants.

The best time to sow turnips is about the 26th of July, and the seeding may be continued up to the 10th of August; but we think it desirable to sow between the 26th of July and the 1st of August.

Early Turnips.—Those who desire to raise a patch or bed of early turnips, should sow immediately, following our advice as to the mode of preparing the ground, &c. as recommended for the fall crop.

Corn.—As the time for planting corn is over, it may perhaps, be considered superfluous to speak of the application of manure at this late period, yet as we believe there are those who could not manure all their corn ground, we will make a few remarks upon the subject, as well as upon that of keeping the crop clean.

Whenever corn may have been planted in a thin soil without manure, the yield may be greatly increased by applying, at any time before the last working, even a handful to each hill, composed of two parts well rotted manure or woods-mould, 1 part ashes and 1 part plaster, say at the rate of two bushels of the first and 1 of each of the latter to the acre.

This work can very readily be performed by children, and will most bountifully repay the labor bestowed. Don't let any one say it is too late to think of manuring corn after the plants are up, because it is never too late until after the ears are filled. Our opinion is that one of the reasons the ears being half filled arises from the fact, that the soil does not afford food enough to fill them out with grain. Supply the defect in the way we propose, and the cause being removed, the effect will not follow.

Upon the mode of working corn we would be indulged in a few observations. After the first working, we would advise that the *Cultivator* be substituted for the *Plough*. Reason, and the very nature of things, teach us, that every ploughing after the lateral roots stretch across the furrow is wrong in principle and injurious in practice. For what purpose has nature provided the corn-plant with lateral roots? why, for the purpose of feeding. Every one of these are provided with apertures, or mouths, with which they drink up food as it may be elaborated in the earth. And is it not reasonable to presume that if you break off and lacerate these, that the regular supply of the stalk must be curtailed. If we admit this, then there is no need of argument to prove that every breaking off of the roots is injurious, and must necessarily shorten the crop of grain, as without the stalks receive the requisite quantity of nutriment, it is impossible that they can prepare the substances out of which the kernels are formed. No one will deny that the roots are lacerated and torn asunder by the plough; then in the face of injuries so palpable, why should the practice be persisted in? Would it not be better that an implement should be used, which we must all be convinced cannot harm, while it will effect every good which can result from the use of the plough. Every use of the plough after the first, from the very nature of its construction, must prove injurious in the way we have pointed out, while the only benefits it can effect, viz:—the opening the earth to the influence of the atmosphere and rains, and the keeping down weeds and grass, can be equally as well attained by means of the cultivator—besides, the cultivator will do three times as much work in a day—so that independently of its superior adaptation to the purposes intended, it comes commended to all upon the score of economy.

We have spoken of applying a mixture of mould, plaster, and ashes; but if it should not be convenient to do so, it may be well to sow a bushel of plaster per acre, immediately after the corn shall have been worked for the last time, and for an explanation of its mode of operation, we beg leave to refer our brethren to the article in this day's journal, under the head of "*The Action of Plaster*." In that they will see, that it is a provider of the food from the atmosphere and rain—that it attracts from the one, and condenses from both, the nutriment they contain, holds it in reserve, and, as it were, on each succeeding rain, offers it up in the shape of prepared food to the roots of plants.

Orchards.—Turn your hogs and pigs into your orchard to eat up the falling fruit, and thereby get rid of the curculios which are imbedded in every apple that falls. In addition to this precaution make a mixture such as we have often recommended to you, in the proportion of two gallons of soft soap, 1 lb. of salt and 1 lb. of flour of sulphur, and have the trunks of your trees, from the ground upwards painted with it. This mixture besides proving destructive to the eggs and embryo of insects will otherwise prove beneficial to the trees.

If you have any peach trees that you set store by, uncover the trunk for a few inches below the surface of the earth—examine each trunk carefully, and in every hole you may find insert the point of a knitting needle, and thus put the worm to death in its hiding place; this done, apply the mixture we recommend to apple trees to the roots as far as uncovered, and the trunk as far as you can reach upwards. Having done this, replace the earth around the roots and trunk, when, by the way of a finale to your work, strew a mixture of three-fourths salt and one-fourth salt-petre on the surface, in a circumference of four or five feet around the tree, as recommended by Mr. Physick.

Weeds.—Recollect, that every weed on your farm that you may permit to mature its seed, is capable of producing hundreds of other pests next year—therefore declare an exterminating war against them.

Sheep.—As this is the season when the fly deposits its eggs in the nostrils of sheep, we would advise you to provide them with a mixture of tar and salt, in equal proportions. Place it in a trough to which the sheep have constant access. In licking up the salt, they will smear their noses with the tar, and thus render their nostrils as invulnerable to the attacks of the fly, as fort Brown proved itself to be to the bombs and mortars of the Mexicans.

Having thus hurriedly sketched out a few of the many duties which you have to perform, and deferentially expressed our opinions where such expression appeared to be justifiable, we will conclude by the sincere and ardent wish, that your labors may be crowned by fruitful crops—that those crops may find ready markets and good prices,—that long ere we shall have closed our present volume, peace with its blessings may have been restored to our common country—and that above all things you may each be favored with health, prosperity and happiness.

Ashes.—At a late Agricultural meeting at the State House in Boston, Mr. Stanly said that he had tried ashes every way. One season he put ashes in the hill in one part of the field, when planted, and on the remainder of the field, applied it soon after the corn came up. Where it was put in the hill, the corn ripened about ten days sooner than the other, and produced at the rate of about ten bushels more per acre. The next year, a part of a row was missed in applying ashes. The result was, that three times the quantity was raised where the ashes were applied.

GREEN MANURING, OR THE APPLICATION OF VEGETABLE MATTER IN THE GREEN STATE.

From a knowledge gained by experience, we have long since made up our mind, that agriculturists place too low an estimate upon the advantages to be derived from the sowing of green crops to be ploughed in as a means of improving their lands. Few if any are able to make, by the ordinary processes resorted to, a sufficient quantity of manure to answer the demands of each succeeding spring; and from the remoteness at which they live from the large cities, it is impossible to obtain supplies thence. Necessity, which is said to be the mother of invention, one would think, would long since have caused many to have turned their attention to this certain, and comparatively cheap mode, but such has not been the case. Those who have Clover leys to turn in, of course, stand in no need of a resort to this plan; but most certainly, those who have not advanced that far towards the melioration of the condition of their soils, should not hesitate in adopting this, the next best plan of driving sterility from their fields. Many we know there are, who have been prevented from entering into the clover culture, because of the impoverished condition to which their lands have been reduced—to such we would say, that they should lay themselves out to enter upon the system of green manuring the next year. And with the view of bringing the subject directly home to them, we shall make an extract from the Lecture of Professor James F. W. Johnson, of the University of Dublin—a gentleman of whom it is not saying too much to declare that, as an agricultural chemist, he is not excelled by any one living. He says:

"By green-manuring is meant the ploughing in of green crops in their living state—or of green vegetables left or spread upon the land for that purpose."

1. Green vegetable substances contain within themselves much water, undergo decomposition more readily, therefore, than such as have been dried, and are more immediately serviceable when mixed with the soil.

2. In the sap of plants also, there generally exist certain compounds containing nitrogen, which not only decompose very readily themselves, but have the property of persuading or inducing the elements of the other organic matters, with which they are in contact, to assume new forms or to enter into new chemical combinations. Hence the sap of plants almost invariably undergoes more or less rapid decomposition even when preserved from the contact of both air and water. When this decomposition has once commenced in the sap, it is gradually propagated to the woody fibre, and to the other substances of which the mass of stems and roots of plants is composed. Hence recent vegetable matter will undergo a comparatively rapid decomposition even when buried to some depth beneath the soil—and the elements of which it consists will form new compounds, more or less useful to living plants, in circumstances where dry and where many forms of even partially decomposed vegetable matter would undergo no change whatever.

3. Further—when green vegetable matter is al-

lowed to decay in the open air, it is gradually resolved more or less completely into *carbonic acid*, which escapes into the air and is so far lost. But when buried beneath the surface, this formation of carbonic acid proceeds less rapidly, and other compounds—preparatory to the final resolution into carbonic acid and water—are produced in greater quantity and linger in the soil.

Thus by burying vegetable substances in his land in their green state, the practical man annually saves a portion of the organic food of plants, which would otherwise so far run to waste.

4. Finally—Green vegetable substances by exposure to the air gradually give up a portion of the saline matter they contain to the showers of rain that fall. This more or less escapes and is lost. But if buried beneath the soil, this saline matter is restored to the land, and where the green matter thus buried is in the state of a growing crop, both the organic and the inorganic substance it contains, are more equally diffused through the soil than they could be by any other known process.

On one other of these principles depend nearly all the special advantages which are known to follow from the employment of green vegetable matter in the preparation of composts.

But this explanation of the principles on which the efficacy of green manuring depends, does not fully illustrate the important practical results by which, in many localities, it is uniformly followed.

Let us glance at these results.

1. The ploughing in of green vegetables on the spot where they have grown may be followed as a method of manuring and enriching all land, where other manures are less abundant. Growing plants bring up from beneath, as far as their roots extend, those substances which are useful to vegetation—and retain them in their leaves and stems. By ploughing in the whole plant we restore to the surface what had previously sunk to a greater or less depth, and thus make it more fertile than before the green crop was sown.

2. The manuring is performed with the least possible loss by the use of vegetables in the green state. By allowing them to decay in the open air, there is, as above stated, a loss both of organic and inorganic matter—if they be converted into fermented (farm yard) manure, there is also a large loss, as we shall hereafter see; and the same is the case, if they are employed in feeding stock, with a view to their conversion into manure. In no other form can the same crop convey to the soil an equal amount of enriching matter as in that of green leaves and stems. Where the first object, therefore, in the farmer's practice is, so to use his crops as to enrich his land—he will soonest effect it by ploughing them in in the green state.

3. Another important result is, that the beneficial action is almost immediate. Green vegetables decompose rapidly, and thus the first crop which follows a green manuring is benefitted and increased by it. But partly for this reason also the green manuring of corn cropped land—(wheat and other small grain) if aided by no other manure, must generally be repeated every second year.

4. It is said that grain crops which succeed a green manuring are never *Laid*—and that the produce in grain is greater in proportion to the straw than when manured with fermented dung.

5. But it is deserving of separate consideration, that green manuring is especially adapted for improving and enriching soils which are poor in vegetable matter. The principles on which living plants draw

a part—sometimes a large part—of their sustenance from the air, have already been discussed, and I may presume that you sufficiently understand the principles and admit the fact.

Living plants, then, contain in their substance not only all they have drawn from the soil, but also a great part of what they have drawn from the air. Plough in these living plants, and you necessarily add to the soil more than was taken from it—in other words, you make it richer in organic matter. Repeat the process with a second crop and it becomes richer still—and it would be difficult to define the limit beyond which the process could no further be carried."

ANALYSES, AND NUTRITIVE PROPERTIES OF INDIAN CORN.

Professor *Playfair*, of England, a gentleman of distinguished chemical reputation, and who has added much light of late upon the subject of chemistry in its applications to the purposes of agriculture, has recently made an analysis of Indian corn, the result of which is as follows:

Protein, (nutritive matter),	7
Fatty matter,	5
Starch,	76
Water,	12

With great deference to the superior acquirements and genius of the very learned professor—and we say this in all sincerity—we think he carries his philological deductions too far, in assuming, that the *protein*, which he was enabled to detect in the 100 grains of corn he analyzed, is the only nutritive constituent elements to be found in it, calculated to nourish or give sustenance to the animal system. The term "nutritive," signifies "nourishing; nutrimental; alimental." If his hypothesis were correct, that only 7 parts out of a hundred of this excellent grain contains nutritive matter, it would be impossible for the human stomach to take in a sufficient quantity at a time to sustain nature; and yet the time has been, when men have been known to perform honest day's labor, week in and week out, when their chief food consisted of but 14 lbs. of corn meal, per week, the rest being less than half a pound of meat, per day. The quantity of bread would, according to the analysis of Professor *Playfair*, have yielded only 2.24-25 ounces of "nutritive" matter, daily, and surely no one, who may consult common sense, would come to the conclusion that any one could perform a faithful day's labour upon a portion of food giving out so stinted a quantity of nourishment. Animal nature could not withstand so disproportionate an allowance. The wear and tear of flesh and muscle, to say nothing of fat, would break down any system, however strong it might be, under its operation, as any living animal, man or beast, to be sustained in the integrity of his action and power, must have a daily supply of nourishment competent to replace that which may be exhausted by his physical exertions, or by the other demands of his system. Without this supply, a daily decrease of his energies would take place—the consequence of which would be, that, in a very short time, life itself would fall a

prey to exhaustion—and yet we do know, that many, whose chief food consists of corn bread, and that not in excessive quantities, do labor—labor well—and maintain their strength and constitutional vigor.

Digressing for a moment or two from *Corn to Potatoes*, let us examine the *analysis* of the latter vegetable. The Potato contains of *Nitrogen*—a constituent identical with the *Protein* of Professor Playfair,—according to the *analysis* of one chemist now before us, 2.9, and that of another 2.7. If we take the mean of these as our standard, the potato has 2.8-10ths per cent. of nutritive matter in it;—now, can it be presumed, that any human stomach could receive into it a sufficient quantity of potatoes to sustain nature if the theory of Professor Playfair were correct? Is it possible that the infinitesimal portion of nutritive matter resulting from the quantity which it could receive, would support life? We think not. That the potato is competent to support life in all its fulness and vigor—both animal and intellectual—is placed beyond all controversy; for one of the most gifted and stalwart of European nations, is, in the mass, mainly sustained by it.

The newly received theory is—that no part of a substance used as food, is nutritive, but its “*nitrogen*”—or, in other words, that none other contributes to the formation and sustenance of the flesh, muscles, &c. of the animal body; that the other constituent elements go to the formation of fat, and the replacement of the bone. This we apprehend is assumption, not fact. One hundred pounds of corn meal, if eaten in its aggregated form, would sustain in good health and strength, eight men for as many days; but can any one presume, that if a chemist were to extract from it the 7 lbs. of “*Protein*,” which Professor Playfair presumes to be its only nutritive matter, that these eight men could be subsisted for that length of time upon that small quantity of matter? Common sense and reason answer no. It would be just 2 oz. daily for each, and we rather opine that such meagre diet would be productive of sad intestinal commotions.

Of “*fatty matter*”—or such as goes to the formation of fat, the learned professor found 5 per cent.—of starch, 76, and of water 12 per cent. To the starch, which comprises 76 per cent. of the whole mass, he does not assign any particular office in the work of keeping up the animal economy as an integral whole,—and acting under the teaching of professor P., one would be reluctantly forced to reject this very large body, as being utterly useless; we do not; but on the contrary, we believe, that in support of the powers of vitality—in the contribution to all that keeps up the perfection of the animal system, that the starch exerts a most important and substantive power—a healthful and sustaining part. In a word, that each and every elemental constituent of all kinds of food, contribute their respective portions in the elaboration and preservation of animal life, and that however philological or scientific it may be, to assume that

nothing but *protein* or *nitrogen*, is nutritive, we believe that such an assumption is more arbitrary than consistent with those principles which common sense would teach us to consider as being just and true.

While we are upon the subject of Professor Playfair's *analysis* of Indian corn, we deem the occasion an opportune one to give place to that of our own distinguished countryman, Dr. Dana, of Lowell, Massachusetts, as made by him in 1842. It is as follows:

100 lbs of corn contain of <i>Flesh forming principles</i> —as Gluten, Albumen, &c.	12.60
<i>Fat forming principles</i> , as Gum, Sugar, Starch, woody fibre, oil, &c.	77.09
<i>Water</i> ,	9.
<i>Salts</i> ,	1.31—100.00

This differs from the *analysis* of Professor Playfair, it will be perceived. While the *flesh forming principles*, which are identical with the “*protein*” of that gentleman, amount to 12.60, his amount to but 7 per cent., a difference of 4.40 per cent., a most material difference, indeed, if, as professor Playfair assumes, the “*protein*” principle is the sole one possessing nutritive properties. According to our view, both the *flesh* and the *fat forming principles* are nutritive, as it must be evident to all sensible and observing minds, that the strongest evidence which a feeder desires of the health of his animal, is that of his being in good condition—that is, *fat*. We do not mean that state of obesity—of morbid fatness,—when fat becomes a burthen to the flesh and muscles, but when the ribs and projecting bones are sufficiently buried and out of view, to present a pleasing sight to the looker-on. Taking the *analysis* of Dr. Dana as our standard, the nutritive principles of Indian Corn amount to 89.69 per cent., a fact which must give to this grain, great popularity when its properties shall have become generally known in England and Ireland.

THE ACTION OF PLASTER.—The beneficial influence of Plaster upon vegetation is owing to the peculiar office which it performs—to the power which it possesses, of attracting from the atmosphere and condensing on its own surface, a very large quantity of ammoniacal gas. The ammonia thus fixed is liberated by the action of rains, carried into the earth, and whilst thus held in solution, is taken up by the roots of the plants and forms an important portion of their nutriment.

Nor do its kindly offices stop with its action on the surface; for although plaster is very difficult of solution, and may be said to be almost an insoluble substance, still its solution may be produced by immersion in 500 times its own weight of water,—decomposition of its own body takes place on every recurring rain, which results in the production of the Sulphate of Ammonia (a soluble salt) and the Carbonate of Lime. As we have before premised, this decomposition takes place slowly—and it is best that it should be so—as to that circumstance it is that we are indebted for its long continued action. That the decomposition of which we have spoken does occur, has long been proved by the tests of analyses made of wheat, clover, sainfoin and pulse, in the ashes of each of which very sensible traces of gypsum have

been detected, and it must be obvious, that it could not be taken up by the mouths of the roots of the plants in any other form than that of liquid.

For the American Farmer.

THINGS IN GENERAL, AND SOMETHING IN PARTICULAR—By A PATIENT PLANTER.

Deeming it important that farmers shall from time to time let their brother farmers know how the crops in their respective neighborhoods are looking, and what is the prospect for a diminished or increased crop, that their prices may be regulated accordingly, and not be wholly dependent upon what the buyers choose to say, or *effect to believe*. I have improved the passing leisure moment to write you upon this and other matters. In Prince George's and Anne Arundel counties, the grain crop bid fair early this spring, and up to the 10th of June, to be above an average crop, but a week of damp, close, rainy weather, just as it was filling the heads, has destroyed from a third to half the crop by rust and scab and black head—certainly one third is lost, and much that will be sent to market will be injured in the sale by being so very indifferent. Good sound wheat cannot fall therefore to bring a fine price this summer. The crops of Hay will be uncommonly fine with us, and the Corn crops look well. Tobacco is as forward as usual, and I am happy to say that the planters have begun a system which prudence and good judgment ought long since have induced them to pursue, that of *making less*, and trying to make that better, by planting early, having more time to secure it, more room to cure it, and more leisure to strip, condition and pack it, and making more grain, be in a situation, I trust, that will put them beyond the necessity of *draining* upon the merchants, and thereby sacrificing their tobacco to the rapacity of watchful merchants, who know every man whom drafts must victimize, and wait for the auspicious moment, as birds of prey hover in the distance over their unconscious game.

Within a few miles of my house, the crop has been this year lessened a million of plants, which is 300 bushels of Tobacco. This is a far *beginning* at reduction. Several have planted this year only half what they usually do, and they deserve great credit for it, for the temptation was strong; plants were plenty, season good, and ground worn scarce. I trust that they will be compensated by extra prices for their firmness in obeying what their judgments pointed out as the proper course for them to pursue, while no doubt, prejudice, old habits, and fear of loss, all prompted them not to give up the "old plan" of planting more than they could work properly and with neatness secure—I can only say, that in ten years experience, I never made a "short crop" but what I got more money for it.

Whilst talking of Tobacco, I am reminded of the model of a machine which I saw at Messrs. R. Sinclair & Co's, when I was last in your city. It was invented by that distinguished and zealous Eastern Shore farmer, Col. N. G. *****; the design is to enable, by its use, the planter to lay off three or more tobacco rows at one time: in a word to do with two horses and one man the work of several men and horses, and to do it better. After tobacco land has been well prepared, it is "laid off" in straight rows from 2 ft. 10 in. to 3 ft. 3 in. apart, and these crossed again at right angles, so as to form checks equidistant, this is done with a plow, and the furrows should be very shallow, or the hills when made are too high or require much hand labor with the hoe to cut them down to a proper level.

The implement I allude to would have the advantage of not running as deep as the plow, and the depth of the furrows would be all alike, beside the rows would then be perfectly parallel, and necessarily the exact distance apart that would be required—I feel assured that the idea is a good one and practicable, and I hope that the well-known ingenuity and ability of those connected with that large Agricultural Establishment, will be turned to this subject, and by another session, our Planters will be furnished with a useful labor-saving machine, planned by one of the best farmers and one of the most useful men in the state, and perfected and made in their usual good style, by one of the largest and best establishments of the kind in this country. I have worked their "double-barring and hilling tobacco Plow," and like it very much—it saves just half the labor of plowing tobacco after the old plan with a small one horse-plow.

As a Marylander, I am delighted, and take pleasure in informing you, that the "American Farmer," is looked upon and valued as one of the very best agricultural papers of the day, and our planters hold it in very high esteem, therefore I am sure your already large subscription list will be greatly increased with your forthcoming new volume. One of our most intelligent and practical farmers the other day, declared to me that he looked upon each number of your paper as worth to him the cost of the year's subscription, and mentioned several facts to prove of what value it had been to him; and this gentleman, sir, was a 1st Premium Farm man, of this county—of his farm, I would here speak, but I fear I have already exhausted the patience of my reader, and will reserve that subject for some future occasion.

P. P.

ON MARL.

Extracts from a letter addressed to Hamilton Rufford, Esq. Corresponding Secretary of the Agricultural Society of Jefferson County, Georgia, by Ex-Governor J. H. Hammond, of South Carolina.

But your inquiry of me was in reference to marl. I must therefore remind you again, that all which has been said of lime is true of marl. If it is slower than lime in its early operations, that is more than compensated by many advantages which it possesses. This is becoming so well understood, that wherever the same quantity of lime can be placed on land as cheaply in the form of marl, it is rapidly superseding the use of it in all other forms. Marl contains besides carbonate of lime other valuable constituents. Its siliceous and alumina though fine in quality are not of much consequence, since they are never thus applied in sufficient quantities to affect the soil materially. But some marls—those in Virginia for instance—contain sometimes sulphate of lime and the valuable green sand of which I have spoken. As the sulphate of lime exists there in eocene marl it may be discovered in our formation. I have seen green sand in specimens from several localities in this State. A deposit of green sand, such as is found and used to an immense extent in New Jersey, would be more valuable in your county than the richest gold mine in the world. There is none of it at Shell Bluff. I have already spoken of phosphate of lime. In marl from Ashley river, in this State, which belongs to the same formation as our marls, 5 per cent. of this phosphate has been discovered. From some crude experiments of my own, I am inclined to believe it exists in some of the marls at Shell Bluff, and probably yours—to what extent I would not undertake to say. But 5 per cent. of it would give you the equivalent of 9 bushels of ground bones in every hundred bushels of marl, which alone would be worth more than the whole cost of applying that quantity of marl, though the expense of it might be five dollars. We cannot, however, expect to find it in such quantity in all marls we use. Those will probably be richest in which are found remains of bones and teeth. In the shell marls on the Rhine, recent analysis has detected an important proportion of azote, derived it is supposed from animal matter. This is the most powerful, as you know, of all manures. There is every reason to believe that a scrutiny equally rigid would disclose a valuable proportion of it in our shell marls here.

The duration of marl in the soil, is undoubtedly greater than that of lime. The question of the duration of calcareous earth applied to lands, is one of great importance itself, and about which you will no doubt desire to be satisfied before attempting to use it. I have mentioned already, that the ancients regarded marl as producing its effects from 10 to 80 years. Lord Kames states an instance of their being observable for 120 years, and Mr. Ruffin another of 60 years. Few or no records of such experiments have been handed down from generation to generation. In those countries where lime and marl have been used most extensively and for the longest period, it is impossible to say how the land produced before they were applied at all, in comparison with its production now. Of late years, more accurate accounts have been kept. The peculiar effects first observed to follow the application of lime, have been thought to disappear or materially diminish at various periods, reaching from 4 to 40 years according to the amount applied and other circumstances. It

is supposed by writers and farmers abroad, that about 3½ bushels of it are consumed per annum by the crop, and that in general the influence of any quantity will cease in from 12 to 20 years. But these conclusions are not to be relied on. It is certain that no crop will take off so large an amount as 3½ bushels, and the loss from other causes is altogether indefinite. While though at the end of 20 years, the same precise effects as at first may no longer be observable, it by no means follows that this may be owing to the want of proper applications of other manures that would excite the lime again to its original action. Mr. Ruffin thinks that marl once placed on land, will endure as long as the clay and sand in it. Though we might not indulge fully in this belief, I am of opinion that it will last for a period which may be called indefinite, from its remoteness—particularly when crops are grown such as we cultivate. Irish potatoes consume more lime than any other crop, perhaps; nine tons, which are sometimes grown upon an acre, though not with us, abstract about 266 lbs. or say 3½ bushels—but 260 lbs. are contained in the tops, which we never take from the land. A thousand bushels of turnips, tops and all, consume about 2 bushels of lime. Wheat, the cultivation of which is extending among us, requires for a crop of 25 bushels, straw and all, about 9 lbs. or a half peck. Cotton and corn do not require more. Seed cotton sufficient to make a bale of 40 lbs.—that 1400 lbs. in the seed will consume about 3 lbs., and most of that in the seed, which is invariably restored to the land. If we treble this amount for the stalks and leaves, which however usually rot on the ground, the exhaustion of lime by our heaviest cotton crops will not exceed half a peck when every thing is taken off. Thirty bushels of corn will consume only about 1½ lbs. of lime: if we add five times this amount for the cob, shuck, blades and stalk, it will not require more than cotton or wheat. I am not aware that our cotton stalks, or our corn-cobs, shucks, stalks or blades, have ever been analyzed; but I have, I think, fully allowed for the lime they may contain. And at these rates of exhaustion, 30 bushels of lime, which is about the quantity contained in 100 bushels of marl that has 60 per cent. of the carbonate, will supply the wants of our usual crops, when much larger than we now average, for 240 years, if the land was cultivated so long without rest or restoring anything to it. The consumption of the crop then is next to nothing. The loss arising from other causes is undoubtedly greater. Quick-lime dissolves in 750 parts of water. A fall of 44 inches of rain, which is less than the annual average quantity that fall here, would afford water sufficient to dissolve 170 bushels per acre. Quick-lime when spread on land, however, becomes a carbonate, and nearly insoluble, too soon to lose to this extent. Still, a considerable amount might be lost in this way, by a heavy rain immediately after liming. Lime after being burnt, falls into a powder. Its minute particles are forced by showers, aided by deep ploughing into the subsoil, and much may be thus carried off. When these things are considered, it is obvious that all the lime in land may in time be exhausted, as it has been from our "drifted" soils. But the chances of its duration are greatly increased by being applied in the form of marl. Being a carbonate, it is soluble by the carbonic acid in rain water only in small quantities, and ages must elapse before it could dissolve and carry off any great amount; and not having been reduced to a fine powder, its particles are too large to be readily drawn down into the subsoil, below the reach of the plow. Without,

then, assigning any precise limit for the duration of marl, I think it may be safely concluded, that the effects of a sufficient application, under proper culture, will last for a longer period than we can conceive ourselves to have any direct interest in the land to which we may apply it.

With regard to what is a sufficient application, there is a great diversity of opinion, and consequently of practice. Viewing it chiefly as a direct manure, in many parts of Europe, lime is applied at the rate of 8 to 10 bushels per acre annually—in others, at 10 to 12 bushels every third year; and again, in other parts, at 40 to 50 bushels every twelve years. But as its indirect effects are as important, and far more numerous than its direct, and it is therefore an invaluable elementary constituent of soils, the true rule for its application undoubtedly is to furnish the soil at once, if possible, with as much as its constitution will bear, and to repeat the dose as frequently as the improvement of that constitution will permit, since the more lime, every thing else being in due proportion, the larger the crops. Acting on this principle, many farmers in Europe put on 3 to 400 bushels of lime at once, and sometimes 1000. Such liming is probably excessive there, and in our climate would be utterly destructive. Marl, however, containing from 50 to 70 per cent. of carbonate of lime, may be safely used in four times the quantity we can use quick lime. The usual dose of marl of that quality in Virginia, varies from 2 to 200 bushels. But more can be applied in Virginia than here. The hotter the climate, the more caution is necessary in the first dose at least. Though this is greatly dependent on the condition of the land to be marled. In the hot and dry climate of Egypt, the fruitful Delta of the Nile contains 25 per cent. of carbonate of lime, which is equivalent in one foot of soil, to some 20,000 bushels per acre of marl containing 50 per cent.: but that soil is much deeper, and its vegetable mould inexhaustible. Depth of soil, and the amount of vegetable matter in it, must chiefly regulate the quantity of marl. M. Puvion has given an interesting table in reference to this. He thinks that we may give to a soil three inches deep, 40 bushels of marl, containing 60 per cent. of carbonate of lime, or 50 bushels containing 50 per cent.; and to a soil six inches deep, 80 bushels at 60 per cent., or 100 at 50 per cent. He does not refer to the vegetable matter, or other circumstances of the soil. I presume that the depths of the soils you cultivate range between the extremes stated, or at least that you seldom plough, and would not, therefore, mix the marl deeper than six inches. I think the amounts he specifies are very safe. As some of my lands are similar to yours, and our climates the same, I will give you my experience on this point. I began to marl by putting 200 bushels per acre, that averaged about 60 per cent. carbonate of lime. On old mulatto land, with a soil about six inches deep, and containing about 4 per cent. of vegetable matter, I have not yet, after four years, perceived any injury from it. On lighter land, containing less vegetable matter, and a soil four to five inches deep, I discovered marl burns the second year. Previously to this discovery, however, I had taken alarm, and reduced the quantity to 150 bushels, on land similar to the last mentioned. On all the thin spots I perceived the "marl burn" from this amount. I then further reduced the marl to 100 bushels per acre, from which I have as yet perceived no injury. Being now about to finish the marling of all my open land, it is my intention to go over it again, and to add 50 bushels per acre at a time, until I have given

to all 200 bushels. I shall by no means, however, venture to do this until, by resting and manuring, I have also furnished to it additional vegetable matter.

I think I may safely recommend you to apply 100 bushels per acre, of the richest marl you have, to any land that now gives you remunerating crops, and 200 bushels, or more, to your best lands. If they are low and sour they will bear still more. I am now putting 250 to 300 bushels on some swamps I have drained, which have several feet of vegetable mould. I should not be afraid to put 1000 bushels on such land—though here I think quick lime would be the best application, as it would hasten decomposition.

It is always most convenient to apply marl to resting lands, and it is also a great advantage to secure, by this means, a new coat of decaying vegetation to start with. So new grounds should be marled the first year: if marled before clearing it would be better still. Very old and exhausted land should be rested two years previously to marling; and in all cases, thin knolls should, if possible, be manured when marled. But a little experience will furnish you the best guides in this regard—you will soon discover all the dangers, and learn to apply all the remedies.

Experience will also teach you in a very short time, the best and most convenient methods of digging, carting, and spreading marl. There are some difficulties connected with digging from marl pits, which, with the means of overcoming them, are stated in Mr. Ruffin's work. They arise chiefly from water, which must be drained off, or pumped out, according to circumstances. I have no experience on this point. My marl is cut from the face of the cliff at Shell Bluff. It is estimated that if a strata of marl is 12 feet thick, 12 feet of covering may be removed to procure it, without hazarding too much. But should you find marl, you need not apprehend much danger of working through it. The great formation of which it is a part, is of unknown depth. Over 100 feet of it is exposed at Shell Bluff; it has been penetrated more than 300 feet in Charleston.

In hauling out marl, the most economical method is to use carts with two mules or horses. In a cart properly made, they will haul 18 bushels at a load as easily as one mule will haul 6. The carts should be made with three shafts, so as to divide the weight of the load equally between the mules, and the tread of the wheels should be four inches—axle-trees of iron. In putting on 100 bushels to the acre, the land should be divided by furrows into squares 28 yards each way. This will give 6 to the acre. A load of 18 bushels to each square will rather exceed 100 bushels per acre, but some will always be lost. The full effect of marl cannot be felt until it is thoroughly mixed with the soil. Hence the first year, little is to be expected from it, and it seldom reaches its maximum until the fourth crop—not always then. Its effects may be hastened, and what is also important, rendered equal, by spreading it with regularity over the land. It is best therefore, to sow it broad-cast with the hand. Each laborer should take his square and spread the pile, using a tray or board to assist him. A hand will spread 9 piles, of 18 bushels each, in a day.

The distance to which marl may be carted depends altogether upon circumstances—one of which is the quality of the marl—another, that of the land—others, the facilities for digging, state of the roads, &c. Along the coast of Scotland, it is transported by sea from 80 to 100 miles. I have been very lately informed, that at a single marl bank on James river, in Virginia, 10 rigged lighters are now engaged in

delivering marl to a distance of from 8 to 30 miles up and down the river, receiving 3 cents per bushel for it, though it is much inferior to ours in quality.

The marl I use, averages about 60 per cent. of carbonate of lime. I cut the whole of it down at Shell Bluff, and boat it about 12 miles up the Savannah river, re-land and cart it. I have marled about 700 acres within a mile of my landing here—but I have hauled some marl 4 miles, and have spread it on about 50 acres, the nearest part of which is over three miles from the river. This is of course very expensive; but I think it profitable, notwithstanding. If I could lay down any rule to regulate the cost of marling, it would be this: That where land is deficient in lime, it would be a safe operation to expend an amount equal to the present value of it, if so much should be necessary to marl it sufficiently. This rule I suggest upon the principle, that it would be profitable to pay twice for land, if you could thereby double its production without materially increasing the cost of cultivation.

You will naturally inquire, whether any one might reasonably calculate on doubling the production of his land by marling. I believe he may, if the marl is judiciously applied and the proper system of after cultivation adopted. I have seen but few statements of the actual results in Europe. It is said in general terms to produce a great increase, though occasionally it is mentioned that the crops were doubled. So perfectly established is the use of lime and marl there, that every one who can procure them, uses them as a matter of course. It is not considered an experiment, and tables of results are not therefore given—at least, I have seen none. A few years ago, Mr. Ruffin addressed interrogatories touching the effect of marl as exhibited in the crops, to a number of the most respectable farmers of Virginia, who had used it, and received answers from twenty-two, many of whom had marled extensively and for a number of years past. These answers were published in the Farmer's Register and in Mr. Ruffin's Report of his Agricultural Survey of South Carolina. Their marl was of various qualities, applied in various amounts per acre, and on different kinds of land, which had been subjected generally to very severe cropping before. No one of these estimated the increase of his crops from marling at less than double, and some of them rated it as high at 400 per cent. I have no doubt, that under favorable circumstances and good management, the last mentioned increase, enormous as it is, may be often realized. The prospect, however, of doubling the crop with reasonable certainty, is promise enough, one would think, to set every one to marling who can do it within the cost I have mentioned. I have not myself, yet doubled my own crop by the use of marl, nor might the practical results of it, which I ought to state, be so striking to a careless observer as he might expect, after all I have said on the subject. They satisfy me, however; and I feel perfectly certain that in a short time, the crops on the land I plant, will be at least doubled, from the effects of marl alone, and much more than doubled, in consequence of other additional applications I am making. I commenced marling in November, 1841. I marled only 175 acres for the crop of 1842, the results of which I reported to our State Agricultural Society, as I did those of 1843, on the same land. They were published, and some of you may have seen them—I will therefore only repeat the tabular statement of those years, and add to it that of the past year. In 1844, these lands rested. The experiment marked No. 1, was made on mulatto land lying on

the river bluff, which in appearance, and perhaps in most other respects, is much the same as the best up-land cotton soils in your county which have been as long in cultivation. Experiment No. 2, was on light, sandy soil,—the sand is very fine, but altogether, the soil is as inferior as any probably that you plant in cotton. I could scarcely have selected lands less calculated to give the marl a fair chance—both having been cleared more than a century ago—badly scoured, and of course greatly exhausted of vegetable matter.

Experiment No. 1. Mulatto Land.

1842. Seed Cotton. Less than un- More than unmar-
married, acre. ed, acre. Pr. ct.

Acre not marled, 1111 lbs.
Do. marl. 100 bu. 846 " 265 lbs. 30.
Do. do. 200 " 1003 " 105 " 10.7
Do. do. 300 " 1318 " 207 lbs. 17.7

1843.

Acre not marled, 493 lbs.
Do. marl. 100 bu. 654 " 161 lbs. 32.6
Do. do. 200 " 759 " 266 " 53.9
Do. do. 300 " 841 " 348 " 70.

1844 Rested.

1845.

Acre not marled, 324 lbs.
Do. marl. 100 bu. 481 " 157 lbs. 48.4
Do. do. 200 " 584 " 260 " 80.2
Do. do. 300 " 642 " 318 " 98.

Experiment No. 2. Sandy Soil.

1842. Corn. Less than unmar- More than unmar-
ried, acre. ed, acre. Pr. ct.

Acre not marled, 17 bush.
Do. marl. 100 bush. 21 " 4 bush. 23.5
Do. do. 200 " 21 " 4 " 23.5
Do. do. 300 " 18 " 1 1/2 " 8.8

1843. Seed Cotton. Less than un- More than unmar-
married, acre. ed, acre. Pr. ct.

Acre not marled, 361 lbs.
Do. marl. 100 bu. 451 " 90 lbs. 24.9
Do. do. 200 " 384 " 23 " 6.3
Do. do. 300 " 173 " 188 " 108.6

1844 Rested.

1845.

Acre not marled, 230 lbs.
Do. marl. 100 bu. 317 " 88 lbs. 37.7
Do. do. 200 " 301 " 71 " 30.8
Do. do. 300 " 159 " 71 " 44.6

The first thing that will strike you on looking at this table, will be, that the crops have regularly and excessively diminished, from the time the land was marled. It might be concluded that I had ruined my land by marling. Such I will candidly own would have been my own conclusion, if fortunately I had not kept these unmarled acres to test the success of my operations. Disastrous as have been the three last crop seasons in this section of country, I would not have believed it possible that there could have been such a falling off from seasons alone, and I should have abandoned marl, in spite of the experience of the rest of the world, as injurious, at least to my soil. But great as has been the decrease of production on all the acres, it has been far greatest on the unmarled ones. That of the others, has comparatively steadily increased, except the 200 and 300 bushel acres in No. 2, both too heavily marled, but both recovering again under the rest of 1844. In No. 1, the acre with 100 bushels has increased from 30 per cent. below, to 48.4 per cent. above the unmarled one—making an actual comparative increase of 78.4 per cent. The acre with 200 bushels, has in the

same way increased 90.9 per cent. Both these acres are decidedly inferior to the other two in No. 1, and have, I do not doubt, produced this year double what they would have done without marl. The other two acres in No. 1, are a pretty fair test of the influence of marl, being as nearly equal in quality as could have been selected. The sandy land, in time and with proper management, will, I am certain, exhibit results fully as favorable as the mulatto land. It was too far exhausted when marled. I did not reserve test acres on any other fields, but I feel sure that they have derived equal advantage from the marl, in proof of which I could state many facts to one present on the spot, which it would be tedious to mention and explain fully in this letter. I will only state one: The unmarled acre in No. 1, is one of the best acres I plant. In 1842, it yielded 1111 lbs. The average of my whole crop that year, was 666 lbs. per acre. The last year, the same acre, after a rest, produced 324 lbs. The average of my crop was 391 lbs. per acre. Thus, the yield of the unmarled acre, was in one instance 66.8 per cent. above, and in the other, 20.6 per cent. below the general average—making a difference of 87.4 per cent. in favor of the marled lands. Let me add that in 1842 the unmarled acre in No. 2 produced 8.8 per cent. less than the average of the crop. In 1843 it fell to 37.6 per cent., and in 1845 to 70 per cent. below the general average. If these facts may be assumed as data, on which to base a calculation, had the last year been as favorable in all respects as 1842, the average of my cotton crop must have been over 1200 lbs. of seed cotton per acre, and of my corn crop over 28 bushels per acre. This however is only a paper calculation, and 1842 was a fine crop year. Time will reveal the truth.

I cannot give you a better evidence of the firmness of my faith in the virtue of marl, than to state, that notwithstanding the discouragements of the last three extraordinary seasons, I have, at great expense, brought up from Shell Bluff, within four years, over 300,000 bushels, carted it out, and spread it over about 2300 acres of land; and am at this moment as actively engaged at it as ever. Nor do I look forward to a period when I expect to cease using it to a considerable extent every year, either on fresh land, or in increasing the dose on those already marled. It would be leading you into error, however, to leave you to suppose that I rely solely on the marl to improve my lands. Rest, in connexion with it, is indispensable, and manure becomes far more beneficial. I have, accordingly, by opening more land, and reducing my planting, enabled myself to rest, annually, one third of my fields. And I have already hauled out and mixed together, for the coming crop, 55,000 bushels of muck, and 48,000 bushels of manure from stables and stable yards, hog and ox pens, &c., having yet about 20,000 bushels more to carry out before planting. I shall not only endeavor to increase this amount of manure every year hereafter, but also, by clearing and reducing the land in cultivation, to rest, as nearly as may be requisite, each field, every other year. Indeed, the management of land, after it is marled, is of the utmost consequence to the efficiency and profit of marl. Though lime is itself a portion of the food of plants, and therefore a manure, this is perhaps the very least of its virtues. Its indirect operations are far more important. It is the grand agent that prepares for the crop nearly all the food which the earth furnishes. It is the purveyor general—no—the farmer must fill that office: it is the "chef de cuisine" that selects the ingredients, mixes, and seasons almost every dish to suit the deli-

cate appetite of the growing plants. It is from the materials placed in the soil by nature, or the industrious husbandman, that this skillful artist draws the rich repasts it furnishes; and it could no more furnish them without these materials, than your cook could make your soup without joints and spices. The larder of the marl must then be amply supplied. The means of doing it are rest and manure. The great gain to the farmer is, that having once engaged in his service this powerful, untiring, and almost universal agent, he may safely exert himself to the utmost of his ability to supply it with every thing necessary to carry on its important operations. Seizing on whatever is valuable, it preserves it from waste—combining with the utmost generosity the wisest economy, it not only yields to the plant all it requires, but stimulates it to ask more, while it is inaccessible to demands from all other quarters.

There is no fancy in this—theory and experiments unite to prove it true. And I trust that no great length of time will elapse before marl shall have written its own eulogy in indelible characters over all the broad fields of your country.

Permit me to conclude this letter, for the great length of which I owe you an apology, by returning my acknowledgements for the honor you have done me in electing me an honorary member of your Society, and by wishing each member of it the utmost success in his agricultural pursuits.

I am, very respectfully,

Your obt. serv't.

J. H. HAMMOND.

FARMING IN ALABAMA.

Farm, near Eufaula, Ala. 26th May, 1846.

To the Editor of the American Farmer.

DEAR SIR.—Feeling it a duty as well as a pleasure from time to time to give my brother Farmers some account of how we do things down about here South, and as the columns of our valuable agricultural journals is the proper channel through which we as a class, are enabled to learn how our agricultural operations are conducted in the different portions of our wide spread country, I, as one, feel willing to cast my mite into the common stock—I find myself at page 105 of my Farming diary for the present year—I have spent twelve hours, each day, for the last fifteen days at my Farm, and find myself much interested indeed. Heretofore it has been my habit for a number of years to ride out daily, and return back to town after making some enquiry as to the why and wherefore of things, but I find it so difficult to get a manager or an overseer that will conduct the various operations of the farm as they should be, that I determined to come out at this important season of the year, and spend the summer at my farm. It is always a matter of much interest to the cultivator of the soil to learn how others following the honorable avocation conduct their operations, for it is true, that there is less concert of action among farmers, taking them as a class, than among those of any art, science or trade whatever. But to the point—having my diary before me, I will give the business of each month of the year, up to the present time.

The month of January, which was a pleasant month for business in our mild climate, was employed in hauling out and spreading compost manure; also attended to turning under the manure with a turning plough—and hauled during the month of January 22,000 bushels of manure, while we spread at the rate of 500 bushels to the acre.

The month of February was devoted to different kinds of business. We continued hauling out and spreading the amount of 18,000 bushels, and having rolled it, and done considerable ploughing, preparatory to planting—commenced planting corn on the 25th February.

The month of March was principally taken up in preparing land for Cotton, that is, breaking up and bedding it, after we finished planting corn, which was done on the 8th March, making about ten days planting the corn crop—we continued hauling out our manure during the month of March to the amount of 8000 bushels, making in all 40 thousand bushels of manure—commenced planting cotton on the 30th of March—we have ploughed and hoed over our corn four times, and are now laying it by; we cut our small crop of wheat on the 26th inst. and find it very superior—the seed I procured while north the past summer—we sowed two varieties, the one the bearded wheat, the other what is called the blue stem wheat—I am much pleased with the Multicole Rye,—it is now nearly ready to cut—I am also pleased with the Polish oats, as well as the twin corn and the Italian rye-grass—all the above seed, together with many others were handed me by Mr. Burke, the commissioner of patents, while at Washington City. I am highly pleased indeed with the American Farmer, and esteem it as one of the most valuable agricultural papers I take, and I am a reader of some seven of those highly important journals. Please present my kindest respects to my old friend, Mr. Sinclair, and his venerable lady, also his son, and Mr. Corse.

With sentiments of the highest esteem,

Your obedient servant,

ALEXANDER McDONALD.

SOUTHERN HEMP OR BEAR GRASS.

We find in the Tallahassee Floridian of the 15th, (says the New Orleans Bulletin) the following letter from Gov. Call to Gov. Moseley, in relation to the cultivation of Hemp from the plant known by the name of Bear Grass, and indigenous to the Southern States. The Floridian introduces the letter with some remarks on the agricultural advantages and the products of Florida, from which we give a short extract:

“We have heretofore remarked that we believed there was no country under the sun where the honest, industrious cultivator of the soil could obtain a living with more ease and less labor than in Florida. We are every day becoming more and more convinced of this fact. The salubrity and healthfulness of the climate, the richness and fertility of the soil, the variety of productions, and the ease with which they can be cultivated, all prove this. Almost every year we have a new article introduced into cultivation, which has been neglected or overlooked for years past, in the all-absorbing mania for raising cotton. In some parts of the Peninsula we can raise most of the tropical fruits in perfection; in all parts, many of them; and in quantities, if the culture is properly attended to, to render their production profitable. With the people of Florida, then, there is no necessity of confining themselves to one particular. We have before noticed some of the most profitable productions—cotton, sugar, tobacco, &c. We have this week a new article to notice, which has heretofore been neglected—the Bear Grass. We present to our readers the subjoined account of it, from Ex-Gov. Call, to Gov. Moseley.”

To his Excellency, WM. D. MOSELEY,

Governor of the State of Florida:

SIR:—I have the honor to present to your Excellency a specimen of the Florida Hemp, produced from the plant generally known by the name of "Bear Grass." It abounds in Florida in its native, uncultivated condition, and it is believed that it may be propagated to an indefinite extent. Nothing feeds upon it, and it therefore needs no enclosure. It grows in the forest frequently to the height of three or four feet, and, no doubt, may be improved by cultivation. It loses scarcely anything by the process of manufacture—the hemp being about the same length as the leaf. It is found indigenous in most of the Southern States, and, though being neglected and unnoticed, from the successful results of experiments recently made, I feel assured it is destined very soon to become one of the most valuable staples of our country. In the present depressed situation of the cotton market, owing to the superabundant production of that article, such a result is greatly to be desired. And if my anticipations are realized, the Southern Hemp will become more abundant and more profitable than that of the North, and will contribute but little less than cotton to the population, wealth and power of the Southern States.

The resemblance of the Hemp of Florida, both in its native condition and after its manufacture, to that of Manila, induces a belief that it is equal in value if not superior to that article, and that the same process may be required for its cultivation and preparation for market. Although I am well satisfied with the result of the experiments I have recently made for the latter purpose, and am convinced that, without any improvement whatever in the method I have pursued, the labor of every hand engaged in its production will be more than twice the value of the same amount of labor employed in a cotton field, yet it may be found, on inquiry in the country where the Manila Hemp has been produced for so many years that a much better plan has been produced by long experience. Deeming this a subject highly worthy of inquiry, I would respectfully suggest to your Excellency the expediency (should you think favorably of the proposition) of requesting of the Government of the United States, through some of our foreign Consuls, to obtain all the practical information in regard to the cultivation and preparation of this valuable article of commerce.

The experiments I have made have been as simple and expeditious as they have been satisfactory in their results. The leaves of the plants have been plucked from the bud, around which they cluster, tied up in convenient bundles, boiled, and pounded, until the green bark and soft vegetable matter is disengaged from the strong fibres, when they are put in water, and washed out with great ease.

But the apparatus I have suggested, and in which I have great confidence, (sufficient to prepare from two to three tons per day,) is a heavy wooden wheel, to traverse a circular platform, firmly constructed and covered with strong plank. The wheel to turn on a shaft, carved in the form of a screw. One end of the shaft confined and turning on a pivot in the centre of the platform, which will cause the wheel in its revolutions to traverse every part of the platform. The action of the boiling water for twenty-five minutes will prepare the leaves for the wheel.—The bundles, which will then have shrunk considerably, should be re-tied, to prevent the tangling of the Hemp, placed carefully on the platform, until it is covered, and the wheel put in motion by the ani-

mal's hitted to the outer end of the shaft, and moving in a circle on the outer edge of the platform. When the wheel shall have reached one side of the platform, by its revolution on the screw, the animals moving it are to be turned and driven in the opposite direction around the circle, which will cause the wheel to traverse back again to the opposite side. While the wheel is in motion, water should be frequently thrown on the plants, which being permitted to escape by vents from the platform, carries with it all the surplus matter, (in a state of solution,) disengaged from the strong fibres by the friction and pressure of the wheel, until the Hemp is washed perfectly clean. It should then be taken from the platform and hung out to dry, which completes the process of preparation, and the article is ready to be packed up for market.—This process will succeed until a better is devised.

Every good plant will produce one pound of clean Hemp. Some have exceeded that quantity. The best specimens from the uncultivated plant are from three to four feet long, and the fibres coarse or finer, in proportion to the age of the leaf, as you see by comparing the smaller parcel I send you, (composed of the bud leaves only,) with the larger. From five to six thousand plants may be produced from one acre, which will yield as many pounds of good Hemp. The specimens I have shown are estimated, by our most intelligent merchants, as superior to the Manila, and are considered worth from eight to ten cents per pound in the New York market. At these prices, there is no cultivation in the United States so valuable.

I have made experiments on the plant known by the name of the "Spanish Bayonet," which abounds on our Southern sea-board, and find the fibre equally good in every other respect, though not so long as "Bear Grass." I learn from men who have been accustomed to cut up the latter plant annually in the cultivation of their fields, that it is almost indestructible. Should this be the case, it would require to be planted but once, after which it will continue through a succession of years to yield its valuable tribute without cultivation. Such results, though very imperfectly realized, will render the Florida Hemp a most important production. It will add to the prosperity of the wealthy, give profitable employment to the laboring classes, both in Agriculture and manufactures, but to the poor it will be an inestimable blessing. It will invite emigration, ensure a dense white population, and make the South the richest and most powerful portion of the country. Cotton and Sugar can never be produced in great abundance except by slave labor, and the employment of a capital far beyond the reach of the poor. Their culture has therefore a tendency to increase the number of slaves, and exclude a white population. But should the Hemp become a valuable staple, as I confidently anticipate it will, from the simplicity and ease of its culture, and abundant production, it will give the richest and most generous reward to the laborer. There are none so poor as to be unable to avail themselves of its advantages to some extent. The bounty of Providence has placed it within their reach. The production of a few acres will yield a sufficient support for a small family at greatly reduced prices; and where they may not be able to procure the necessary apparatus for boiling the Hemp, the same result may be produced by steeping it in cold water for the space of twenty days, after which they can prepare more of it for market with their fingers alone in one day, than they can pick of cotton in two.

Let the culture be once introduced, and it will never be abandoned while good Hemp is worth two cents per pound

I have the honor to be, very respectfully, your ob't servant,
R. K. CALL.

From the Genesee Farmer.

GREEN CROPS AS MANURE.

An illiterate farmer asked, "why does not my ten acre field sink down, as I and my ancestors have taken more than a hundred crops from it, without ever adding a particle of manure?"

He was not aware that the substance of his crops, was principally obtained from the air, and from the moisture in the soil, so that the quantity of soil itself was little affected.

To prove that plants may be produced from no other substances than air and water, let the following experiment be performed. Procure a quantity of pounded glass, wash it in a clean glass vessel, and plant in it grass seed or grain; let it be elevated from the ground and kept remote from any thing that can drop into it or come in contact with it. Moisten it frequently with perfect pure water, so that not a particle of any thing else come near it. The seeds will vegetate and grow to a height of several inches; and the glass will not be diminished in the least. If the experiment, instead of being made with pounded glass were made with silex, alumine, and carbonate of lime, in those proportions in which they exist when they form the most fertile soils, the result would be the same. It is true in all good soils there exists vegetable and animal matter, the quantity of which is affected by the growth of plants, but these substances form but a small proportion of the whole, and vegetable matter in soils is as likely to be increased as diminished by the growth of plants.

It will thus be perceived, that the practice of enriching land by green crops, is in fact nothing else than obtaining manure from the air and rain;—that plants form a channel through which fertilizing substances are conveyed to the soil, which are taken in by the leaves and pass through the stems to the roots.

The roots of grass in good sward ground make a formidable subterranean forest in miniature, and it is asserted on respectable authority, that more than twelve tons are thus added to the fertilizing properties of every acre of soil. When therefore, the leaves and stems, as well as roots, are also thus applied, the whole quantity becomes very large.

Crops turned under for manure, should always be in a green state, and never ripe and dry. In the former case they ferment and become fit for supporting vegetation: in the latter, they continue unrotted for years.

Loudon, speaking on this subject, makes the following interesting statement: "Among the most active parts employed as manure, I have found the wild species of the genus *Sinapis*, (mustard,) ploughed in fresh in the bottom of turnip drills, at the rate of twenty tons per acre. The produce brought at auction £12, while the rest of the field, manured with tons of farm-yard dung, brought only from £9 to £10 per acre. Other weeds, such as nettles, thistles, &c. produce crops superior to farm yard dung.* Potatoe stems, fresh ploughed in on clover lay for wheat, I have found to produce crops exceeding by two bolls per acre in quantity, with more proportionate weight of straw, than other parts of the same field manured with farm-yard dung, but otherwise

under the same circumstances. The stems from three acres of good potatoes, will manure an acre of wheat, to much better purpose than fifteen tons of farm-yard dung, the usual quantity allowed in that part of the rotation, clover and wheat being the crop which generally precedes fallow."

We think, that in no case farm-yard manure should be rejected or wasted, because all the manure which can possibly be had is always needed in good farming; but fields remote from manure yards, may frequently be enriched at less expense by green manure, than by carting farm-yard dung upon them. This will be evident when we take into account the expense of drawing and spreading on the land, and the fact, that a crop of vegetable growth is already upon the ground, spread as evenly as is desired on the other.

* We have observed in all parts of the country in the latter part of summer, pastures literally covered with an enormous growth of the common field thistle, (*Cnicus lanceolatus*) so that little else could grow upon the land. If this about the time of blossoming, were cut, raked in heaps with a horse-rake and allowed to ferment, they would furnish a vast amount of manure, and prevent the seeds spreading.

BENEFITS OF SCIENCE IN WHEAT CULTURE.

In the last volume of the Journal of the Royal Agricultural Society of England, Prof. Pusey, writing under the date of January 6, 1846, gives the following very interesting communication:

"Several accounts of the good effect of burnt clay as a manure have appeared in the Journal: having used it with success, I am induced to add my own testimony in its favor, chiefly on account of the very bad quality of the land on which it succeeded. It is a farm of about 500 acres, which I bought about seven years since, on the Oxford clay, of the very stiffest description, never plowed with less than four, some times with five or even six horses. The soil was like bird-lime in wet weather, and in dry summers like stone, requiring a pick-axe to break it. Many of the fields might be described as being all subsoil, there being no real mould on the surface. The average yield of wheat did not exceed 16 bushels an acre, and on some fields the thistles were more numerous than the stalks of wheat. It had the worst possible character, so that even in 1839, when prices were good, many farmers who looked at the farm declined to occupy it, and I had great difficulty in finding a tenant at all. Having bought the farm, however, chiefly because it is the most difficult sort of land to manage, (said, indeed, to defy improvement,) in order to try what could be made of it, as Lord Ducie and Mr. Morton have done at Whitfield with so much success, I underdrained the whole, in the first instance at 10 feet apart, but now at 30 feet apart, and 34 inches in depth. In order to make the land work more easily, I procured from Essex some laborers conversant with the mode of burning clay which is there practised. Into the details of that process I need not enter, as excellent accounts of it have been given in this journal by Mr. Pym. I burnt large quantities for the tenant, but until last year no record of the effect had been kept, when, seeing him apply it to a small field of 8 acres, I begged him to omit the burnt clay on one corner of the field, that we might know whether it was worth while to burn any more clay. Mr. Cheer did so accordingly. The crop was a very fine one; and after

harvest he threshed out about one eighth of an acre separately. He found the result as follows:—

ONE ACRE.	WHEAT.
No manure,	37½ bushels.
80 yards burnt clay,	45½ “
80 yards ditto, sheep-folded,	47½ “

It will be remarked that this is not a garden experiment, but applies to a whole field of wheat, and that the account was given in by the occupier of the land. Now I have lying before me the valuation at which I bought this identical field, one of the worst on the farm. It is 10s. an acre for rent, or 14l. for the fee-simple. Thorough draining with thorns, at 10 feet asunder, cost about 3l. 10s. It could now be done with pipes for 2l. Dressing with 80 bushels of burnt clay cost about 2l. 5s. The crop must have been worth this year about 16l., or nearly the fee-simple of the land and the cost of the improvements.

It will be observed that on a third lot the land was dressed with sheep-folding, in addition to the burnt clay, but that the increase of yield was trifling. The manure, in fact, was more than the crop would bear, and the wheat was consequently laid by the wet summer. This is a conclusive proof that the burnt clay, in this instance, acted as a manure, and not merely mechanically. I do not mean that burnt clay will always act as a manure, indeed I know that it sometimes fails to do so, and there is yet much to learn on the subject; but this case of success being beyond suspicion of accident, I have thought right to detail the circumstances of the trial, as an encouragement to the owners and tenants of the worst and most expensive kind of heavy land, which I believe to be the Oxford clay, where it is not covered with soil of a different quality. This farm at Longworth is that on which the trial of the plows reserved from Shrewsbury took place last autumn; and Mr. Parkes, in his report on the implements, bears witness to its obstinate nature.”

Here is an instance in which a “Professor”—the worst kind of a book farmer, purchased 500 acres of land, which had doubtless been regarded as untillable, since the time when Julius Cæsar conquered Britain; and, by the aid of science, made “the first crop nearly pay,” not only “for the improvements, but the fee-simple of the land!”

[For the American Farmer.]

THE REYBOLD SHEEP-SHEARING.

The undersigned, present by invitation, at the shearing of the Reybold flock of Leicester sheep, in Delaware, on the 18th May, report as follows:

The flock is in perfect health and fine condition, evincing great care and consummate judgment in the management, and improvement in fleece and carcass, that, after fifteen years of unwearied diligence in the pursuit of that object, may be supposed to approximate to perfection of form and character. Many of the yearling wethers, as well as the ewes, cut eight pounds of well washed wool, with not a broken fleece in the whole flock; while a two year old Buck of the Reybold breed cut eleven pounds and a half of washed wool, of superior quality and fineness.

The imported pure Leicester Ewes are splendid specimens of that favorite breed, and cannot, perhaps, be excelled in any country; cutting fleeces of very carefully washed wool, 7 and 8 lbs. each, of quality and snowy whiteness.

The imported Bucks of the “New Oxfordshire Breed,” it would be difficult to describe in language

that would do them justice. To say that nothing equal to them has ever before been exhibited in this country would be but faint praise—indeed, they must be *seen and felt*, before they can be *understood*. They were shorn by two old and experienced English shepherds, who declare they never sheared or saw their equals in England, *by a long shot*. By the most careful admeasurement, before shearing, they were found to exhibit the following enormous proportions:

No. 1.—3 feet across the back,
5 feet from nose to rump,
7 feet 4½ inches in circumference,
Live weight, 320 lbs.

No. 2.—2 feet 2 inches across the back,
5 feet 2 inches from nose to rump,
7 feet in circumference,
Live weight, 272 lbs.

The fleece of No. 1, weighed 13 lbs. of carefully washed wool, white, and of silky texture; while No. 2 cut a fleece of washed wool weighing 17 lbs., measuring nearly a foot in length of staple, of superior quality; and which, if it had been left unwashed, would have exhibited a fleece, more than 22 lbs. in weight. After shearing, No. 1 was found to measure 5 feet 6 inches in circumference behind the shoulders; but it would be vain to attempt to convey by description, an idea of the enormous width and depth of carcass, or the way in which the masses of fat are laid on upon the sides, breast, rump, and back of the animal; suffice to say, in the estimation of judges present, the carcass would cut from 6 to 7 inches thick of fat on the rib, if the sheep were slaughtered at the present time.

The Lambs, a cross with these Bucks on the largest of the Reybold Ewes, exhibit a remarkable consanguinity of form and character to their sires, and no doubt will rival them in the hands of their careful and judicious owner, who will leave nothing undone that can be made subservient to his purpose, namely, the creation of a flock of sheep that shall equal those of any quarter of the globe, for wool and carcass combined. We are happy to find that enquiries and orders for Bucks are being made of the enterprising owner of this magnificent flock, for distant plantations; may success attend him in his patriotic undertaking.

Mr. Clayton Reybold succeeds his father in the ownership of the Reybold flock. His address is, Delaware City, Delaware.

J. W. THOMPSON, M. D.
ISAAC REEVES,
JAMES PEDDER.

Delaware, 20th May, 1846.

From the Farmer's Monthly Visitor.

RAMBOUILLET MERINO SHEEP.

Some of the readers of the Visitor have doubtless heard of the importation of D. C. Collins, Esq., of Hartford, Ct., of a small lot of these justly celebrated sheep—20 ewes and 2 bucks—in 1840, from the Royal flock at Rambouillet in France. The original flock was made up of selections from seven different flocks or cavana in Spain, by a special commission from the King of France, on leave from the King of Spain, and were driven out of Spain and placed upon the Royal estate at Rambouillet in 1786. In the terrible Revolution, consequent upon this period, these sheep were taken under the care and patronage of the Convention and the subsequent governments, and ever since have been bred with the greatest care. For many years past no pains have been

spared to perfect the flock, and all competent writers and travellers now agree that it is probably the best flock in Europe and in the world. The present flocks of Spain are almost infinitely below them as to every quality desirable in a perfect sheep. In the civil wars which distracted Spain for many years past, their once celebrated cavañas of sheep have gone to waste and neglect, and it is probable that the merino flocks of the United States now far surpass those of Spain. So say modern travellers who have examined both. Not so with the Rambouillet. They are head and shoulders above anything that has ever been produced in the United States.—Sixty years now they have been in a course of improvement, and let any one examine these sheep, and he will see that the improvement has carried them beyond any other pure merinos. A special scientific Commission of the French government, of men best qualified for the duty, make a particular examination each and every spring, and report what improvement in their opinion can be made in this flock, and the course to be pursued to attain it. This the French shepherds regard as their rule of conduct for the year ensuing—and endeavor to carry it out to the very letter.

Hence we have in the Rambouillet merinos an unrivalled race of sheep, as the result of a long and steady course of improvement. They are of a larger size, of stronger constitutions, finer, softer, more compact, more even, and more weighty and valuable fleeces, than any other race of pure merinos. Their like cannot be found out of France. They are not like the merinos of Spain,—not like the merinos of the United States—not like the Saxons of Germany—but far above them all.

The flock now in the possession of Rev. L. G. Bingham of Williston, Vt., must be regarded as a great acquisition to this part of the country—and as a source from which may be derived stock sheep that shall greatly improve the justly celebrated flocks of Vermont and New Hampshire, both Saxon and Merino. It is generally supposed that they will shear over 5 lbs. per head, of clean washed wool, of one year's growth. They are entirely free from gum, and the staple is in many individuals in the flock, as fine as the finest Saxony. Manufacturers have said that in their judgment these sheep will cleanse a quarter more wool on the average, and that it will sell a quarter higher than American merino wool, that has come within the bounds of their knowledge. Being of very long staple—very thick and fine, running even over a large carcass, they must make a noble cross on our fine Saxon flocks—thereby increasing the size of the sheep, the weight of fleece, and strength of constitution, and not diminishing the fineness of the fibre. I know of some instances where a cross of this kind has been made to the very best advantage.

Mr. Bingham's sheep are called for as fast as he has them to spare, to go west and south. A ewe has never been sold out of the whole flock, since their arrival in the country, and cannot be bought on any terms. Bucks sell for \$100, and upwards. The following, from the American Agriculturist, whose editor is good authority in these matters, will be read with interest. Mr. Allen is one of those singular men, for these days, who speak their minds without fear or favor—resolutely determined to mete out exact justice, let it cut where it will. On this account his opinion, when given in favor of any thing, is the more to be prized.

RAMBOUILLET SHEEP.—We spoke in a little note in our last number, of having sold the entire flock of

these sheep belonging to Mr. Collins of Connecticut, to Mr. L. G. Bingham, of Vermont, and that we intended to notice them when they passed through this city, as we thought they might deserve. Two years ago last June, we inspected these Rambouillet, and found them superior to any thing we had before seen in the United States. Since this we have looked over a good many other Merino flocks, embracing some of the finest native bred animals in the country; and with these fresh in our minds, we aver upon this second examination of Mr. Collins' importation, that we know no other sheep equal to them for fineness, softness, felting qualities, evenness, closeness, and weight of fleece, coupled with great size of carcass, style, and an indefinable air of high breeding. They are also thrifty, hardy, and of excellent constitution. We should judge them generally to be from one-tenth to one-fifth larger in size than the average of good Merino sheep. Some of their fleeces are almost as fine as the finest Saxon, and none are of an inferior quality; they are also remarkably free from gum; and yet the fibres of the fleece are so fine and close together, as to render it almost impervious to the severest storms. Instead of the very objectionable gum, their wool is well supplied with yolk, equally diffused, and imparting to the fleece on opening it, a rich, bright, golden color. This, when washed in tepid water, unlike gum, is easily cleansed out (being nothing but a pure animal soap,) leaving the wool soft, and of a most beautiful clear white.

These sheep will make an excellent cross on the Merino flocks of Vermont, and we recommend them to the attention of breeders in that quarter. They are a most valuable importation, and Mr. Collins deserves the thanks of the country for his spirit and liberality in making it. They are pure Merinos, bred in the Royal flock at Rambouillet, one of the best probably in Europe.—The originals of these superb animals, by permission of the king, were chosen from the best flocks in Spain, about 60 years ago, and have since been bred by the French government with the greatest care.

TOM JACKSCREW AND ARGONAUT CHIEF.—We are informed by the owner that these fine Stallions finish their present covering season on the 1st of July. They have been patronized very liberally. Mares of a very superior kind are such principally as have been sent to them, and as all of them were *stinted* at a very early period after they were sent, the horses are in fine health and vigour. Indeed, these horses have been noted as very sure foal getters.

As very many enquiries from different parts of the state, have been made about them, we are authorised to say, that either of them may be engaged for a fall season for a stipulated reasonable sum, or would be sent at the owner's risk to any neighborhood represented as likely to patronise such horses. Address R. Gilmor, jr. Glen Ellen, near Baltimore.

THE DENGUE.—This is the name of a disease at present sadly prevalent among horses. We are informed by a lively stable keeper that on one night last week sixteen of his horses were taken with it, and in other stables many horses are afflicted with the same disorder. It makes its attacks suddenly, the eyes swelling, and the whole system taking on an inflammatory condition. It is treated by blood-letting, purging, and low diet. It is a rapidly-fatal disorder.—*St. Louis Reporter.*

THE NEW VOLUME OF THE AMERICAN FARMER.

AN OFFER WORTH CONSIDERING!

In addition to the terms offered in our prospectus, we hereby offer the following inducements to the friends of the "American Farmer," to an exertion for the extension of its subscription list:

The person who shall obtain the largest number of subscribers to the "American Farmer," prior to Jan. 1, 1847, on the terms mentioned in our prospectus, shall be entitled to a complete set of the first series of the "AMERICAN FARMER," 15 vols. bound, decidedly the best work ever published in this or any other country, devoted to Rural Economy.

Thus, in addition to the discount allowed in our prospectus, this valuable work will be presented to the friend of our journal who shall be successful in obtaining the largest number of additions to its list.—The subscription price of the old "Farmer" was \$5, the 15 vols. consequently cost \$75! independent of the binding. This is a rare chance for the members of Agricultural Societies to attain a doubly laudable object, viz. the dissemination of a vast amount of the best practical information through the means of the "FARMER," and at the same time secure to their library this standard and justly celebrated work.

For the next largest list, will be awarded a complete set of the "TURF REGISTER," also 15 vols., bound, being the whole period of the existence of that Sporting Magazine, containing splendid steel engravings of the most celebrated horses, besides a large number of other illustrations. The subscription price of this work was also \$5, and the 15 vols. consequently cost \$75.

For the 3d largest list, Ruffin's FARMERS' REGISTER, from June, 1833, to Jan. 1842, (8½ years)—the subscription price of which, at \$5, amounts to \$42½.

For the 4th largest list, six volumes of the "AMERICAN FARMER," embracing the series commencing May, 1839, and ending May, 1845—and vols. 1 & 2 Skinner's FARMERS' LIBRARY—the subscription price of these 8 vols. amounts to \$25.

For the 5th largest list, 6 vols. of the FARMER, as above, (\$15.)—or vols. 1 & 2 of Skinner's Farmer's Library, and Youatt's Treatise on Cattle—at the option of the person entitled to receive the same.

For the 6th largest list, a copy of Downing's Landscape Gardening and Rural Architecture, his Cottage Residences, and his Fruits and Fruit Trees of America—the cost of which is \$8.

For the 7th largest list, a copy of Youatt on the Horse, Bridgman's Young Gardener's Assistant, Bement's Poulterer's Companion—cost \$5½.

For the 8th largest list, Youatt on Cattle—or Downing's Cottage Residences, and Kenrick's American Orchardist—or, Downing's Landscape Gardening and Rural Architecture.

For the 9th largest list, any three of the following works: Kenrick's Orchardist, Buel's Farmer's Companion, Ellsworth's Swine Breeder, Morrell's American Shepherd, Skinner's Cattle and Sheep Doctor, The Farmer's Mine, Mason's Farriery,

Gaskins' Farmers' Guide, Faulkner's Farmer's Manual, Buist's Rose Manual.

For the 10th largest list, any two of the last named works—or a copy of Froissart's Chronicles of England, France, Spain, &c.—or a complete set of Scott's novels, 5 vols. in paper covers.

The time fixed for determining to whom the above works are to be awarded, is the 1st of January—those who may oblige us by endeavoring to secure the same, may send on the names as received, and at the period named, the whole number obtained by each person will be determined, and the result announced in the Farmer. We wish it to be remembered that the above are offered as presents in addition to the liberal terms offered in the following prospectus, so that those who may not obtain any of the presents, will still receive a very liberal compensation for the time expended in so good a cause:

The American Farmer.

The 2d volume of the new series of this journal will commence on the 1st of July, 1846, and the subsequent numbers will be issued on the 1st of each month as usual. The very extended circulation which the Farmer has attained since its publication in its present form, (being a large octavo, of 32 pages each No.) is a gratifying evidence that the labors of its conductors have not been in vain. The "Farmer" is the oldest agricultural publication in the United States, the volume just completed being the 27th year of its existence; and evinces in its vigorous old age, a stamina which will favorably compare with any of its contemporaries.

Terms:—Single copies \$1.—Six copies for \$5.—Thirteen copies for \$10.—Thirty copies for \$20.

Sample Nos. will be sent to any one desirous of aiding in the circulation of the "Farmer".

Address SAMUEL SANDS,
Publisher American Farmer,
122 BALTIMORE STREET, BALTIMORE.

It will be borne in mind, that our terms are, *in advance*. The trifling sum required for a year's subscription, (\$1) renders it unnecessary for any postponement of its payment.—Although it is desirable that all letters should be post paid, yet we would prefer paying the same, rather than that any delay should be made. Our friends in the city and vicinity would greatly oblige us by handing in the amount of their subscription at the office, so as to preclude the necessity of the expense of a collector.

Subscribers to the "Farmer" can have their volumes bound in a neat style, at 25 cents each.

The proceedings of the Medley's District (Montgomery co.) Agricultural Club, tho' received rather late in the month, we have managed to give in the present number. We think the members of the Club for the very flattering compliment they have bestowed on our journal, and the substantial evidence of their approbation which they are about evincing. We will only say, that we will try to merit their kind offices.

FARMERS' LIBRARY.—The 2d volume of this work, edited by Mr. Skinner, commences this month, and from the indications we have had in regard to it, we think our friend S. will present a volume of unequalled value.

Subscriptions to the "Library" received at our book store, where the numbers will be delivered free of postage to residents of the city and vicinity. Price, \$5 per annum.

Those wishing to supply themselves with superior young Bulls, are referred to an advertisement in another page. They will be sold at a very low figure for the quality of the stock.

GUANO—Peruvian, Bolivian and African, supplied at very reduced prices, by S. SANDS, office of the "Farmer."

AN ORNAMENTAL FARM-HOUSE.

FROM DOWNING'S "COTTAGE RESIDENCES."

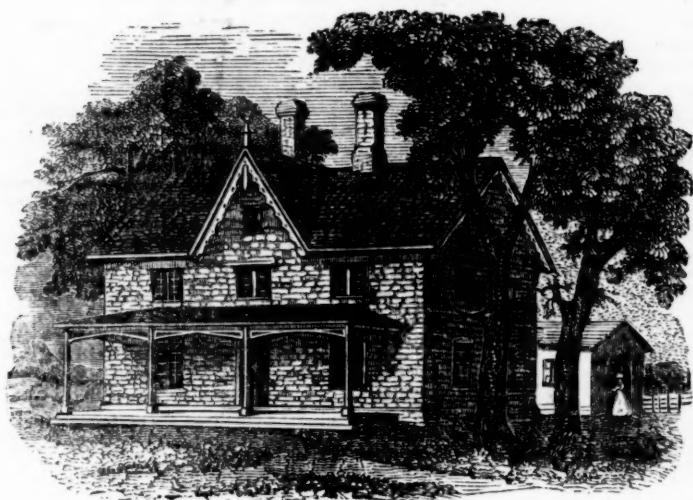


FIG. 1.

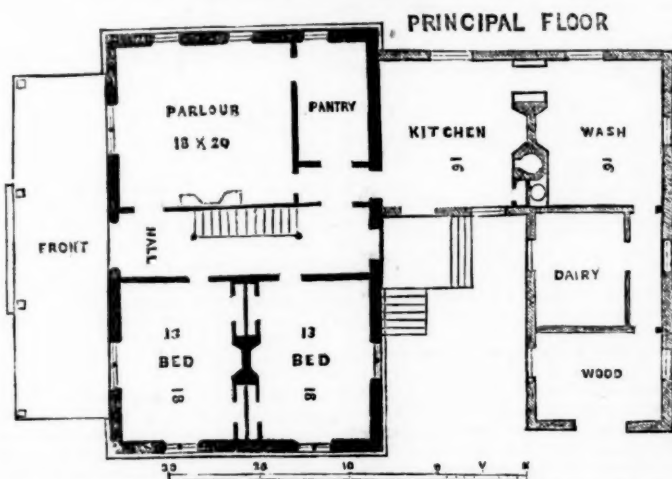


FIG. 2.

In designing this farm house, we have had two objects in view; first, to offer to the large class of intelligent farmers, a plan of a house of moderate size, somewhat adapted in internal accommodation to their peculiar wants: and secondly, to give to the exterior, at a little additional cost, some architectural beauty. The first object, it is evident, must ever be the principal one in a farmer's dwelling, and therefore every thing should yield to such an interior arrangement, at as will give the greatest amount of comfort, and the maximum of convenience, in performing in-door labor. But beyond this, there is no reason why the dwelling houses of our respectable farmers should not

display some evidences of taste, as well as those of professional men, or persons in more affluent circumstances. The farmers are really the most independent men in our community, as their wealth is less liable to fluctuation than that of any other class; and if the amount which they wish to expend upon a dwelling, be less than that within the means of others, they are generally able, on the other hand, by having abundance of stone or timber on their own premises, to build at a greatly reduced cost. By bestowing some degree of ornament on farm houses, we shall hope to increase the interest and attachment, which the farmer and his family have for their home, and

thereby to improve his social and domestic state. A man who is content to live in a clumsy, badly contrived, and uncouth habitation, will generally be found to care little for his home, or to have in his heart but a scanty flow of genial domestic sympathies. This love of home, and with it all the tender affections bound up in that endearing word, will be sure to grow with every step we take to add to its comforts, or increase its beauty; and if we feel a species of affection for the goodly trees we have planted, which, growing along with us, seem like old and familiar friends, we must acknowledge a still greater attachment to a dwelling that we have built, and which becomes our own home, whether it be a cottage or a mansion, if there is an air of taste lurking about it, and breathing out from vine covered porch or open window casement.

We are especially anxious that the farmer should cultivate a taste for improving his home, including under this term his dwelling, and his garden or grounds, as we are confident that in so doing he will unconsciously open to himself and his family new sources of enjoyment, beyond such as are directly derived from their beauty and convenience. It is unquestionably true, that we learn to appreciate the beauty of nature, in proportion as we become familiar with the beauty of art. Now, although we do not expect farmers to possess a gallery of pictures or statuary, yet they have a scarcely less instructive field open to them while tastefully disposing their gardens and grounds, in studying the various developments of beauty that occur, and become familiar to the mind in these, and all other employments, unfolding the order and harmony of a well regulated home. And we will venture to assert, that no person, however small his original knowledge, has followed these occupations thoughtfully for half a dozen years, without having his appreciation of the beauty of all nature, and especially the beauty of trees, forests, hills and rivers, a thousand fold increased.

By referring to the plan of the principal floor, Fig. 2, it will be seen that the main building, 30 by 46 feet, is two stories in height, and contains on this floor a hall, a parlour, two bedrooms, and a large pantry. The parlour, or sitting-room, is an excellent apartment, suitable for any occasion, and the pantry being placed between it and the kitchen, either of these rooms may be used to dine in; while the passage, with two doors between the parlour and the kitchen, prevents the noise of the latter from being heard in the former.

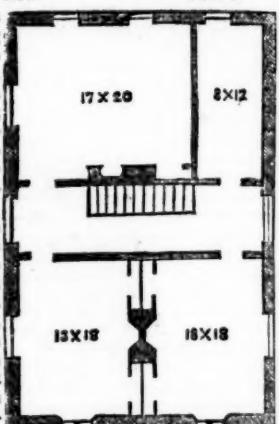
The kitchen, wash-house, dairy, and wood-house, on the same level with the main building, are contained in an L-form addition in the rear, one story in height. The kitchen is 16 feet square, and opens also by a back door, upon a broad stone platform, under which the steps next the main building descend to the cellar. The wash-room is 16 feet square, and has by the side of the fire-place a circular copper boiler set, for boiling the clothes. There is a passage from the wash-room, communicating directly with the wood-house. The dairy may, if it is thought advisable, be sunk three feet below the level of the wash-house, and paved with flag stones, in order to keep it cool; and there may be a raised shelf of stone all around it, on which to place pans of milk. In this case it would be entered by descending four or five steps. The wood-house has a large door, to facilitate unloading from the wood wagons.

This dwelling is supposed to be constructed of rough stone, or stone partially smooth on the face, but not laid in regular courses. Such stone is abundant

throughout a great portion of the United States, and makes excellent walls.

The plan of the second story, Fig. 3, affords three good bed rooms, closets, &c., and a small bed room; and above this story is an ample garret for drying various seeds and vegetables.

The cellar is large, being of the same size as the main building, and on the side next the carriage road, should be placed a slide, wide enough to receive a cart load of roots, which will save much la-



bor and time usually occupied in carrying them in baskets.

We have given the preference to the *Rural Gothic* style in composing the exterior of this dwelling, partly on account of the large lofts or garrets, so useful to the farmer, afforded by the steep gables and roofs, and partly on account of its intrinsic beauty and picturesque effect when built of stone even in this simple manner. We have introduced a *veranda* in the same style in front, because such a feature is as necessary to the comfort of a farm-house as a villa, in this country.

Where all the outbuildings are to be erected at the same time with the dwelling-house, something of the same style should be evinced in their construction. It is not necessary to attain this, that ornamental verge boards, or windows, or other minor details, should be introduced in barns or the like structures, but it will be sufficient if attention be paid to repeating the same general forms in the *outlines* of the buildings, and of these the form of the roof or gables is most essential.

In some districts, wood is the only material which comes within reach of the farmer. When this is the case it would be better to adopt another style for the exterior, of a lighter character. We would recommend the simple projecting roof. The arrangement of the rooms would require no material alteration, whatever style of architecture may be adopted for the interior; and a farm-house built in the plainest manner, preserving the arrangement exactly, would still have all the merit of this part of the design, of whatever value it may be considered.

It is evident that to some families another parlour, or a common eating room, but little superior to the kitchen, may be thought desirable. This would be easily obtained by converting the *bed room* into a *dining room* and keeping the *parlour*, (which is now intended to serve the purpose of dining-room also,) as a show apartment, or *best room*. Such a plan might suit the fancy of those who take pleasure in keeping the best and most comfortable room in their house shut, except when they see strangers, but we cannot recommend it as consonant with good taste and that unaffected, genuine hospitality, which ought to characterize "plain country folks."

The construction of this building will be easily un-

derstood by merely inspecting the elevation, as it is extremely simple.

The roof, in this design, projects about a foot beyond the walls of the house. The veranda is supported by octagonal posts or pillars, the openings between which, are ornamented at the top by single arches cut from 2 inch plank. All the exterior wood-work of this building, (except sashes and doors.) should be painted three coats of the same color as the stone, or a few shades lighter, and sanded.

Estimate. The cost of this building, supposing the stone to be found on the farm, and all the materials to be drawn by the farmer, will not exceed \$1700.

THE AMERICAN FARMER.

BALTIMORE, JULY, 1846.

MR. ROBT. C. WRIGHT, is authorized to collect all moneys due this office, in Prince George's County, Md. for subscriptions prior to May, 1845, as also for the present series of the FARMER. This is not intended to interfere with other persons obtaining subscribers and receiving the payment therefor, on account of the present volume.

We are indebted to the Hon. John Wethered, for a package of seeds, obtained from the Patent Office, which we will be happy to distribute among our friends; they consist of the Autumnal Marrow Squash, Okra for coffee, Spurry, fine for winter pasture for sheep, and also excellent for milk and butter; Rice, Brown Mustard, Madder Seed, Tuscan Winter Wheat, Boston Marrow Squash, Mullicole Rye, white Mustard, low Pear Tree, California, and genuine Havana Tobacco.

We are also indebted to the Hon. Mr. Burke, Commissioner of Patents, for a copy of his last Annual Report, from which we intended to have made some extracts for this number, but they have been crowded out.

The Hon. Reverdy Johnson will also accept our thanks for public documents.

We have received a pamphlet copy of the proceedings of the Agricultural Society of Virginia, from which we intend to transfer to the columns of our August number, the excellent Address of the President, Gen. Richardson.

R. T. Bentley's letter on the value of bone dust, in our next.

THE MARYLAND FARMERS' CLUB.

Owing to the immense importance of every hour of time to the agriculturists, during the summer season, it has been deemed advisable to defer the usual monthly meetings for the present. Due notice will be given of their resumption.

In the meanwhile, any papers or other matters of sufficient importance, which may reach the Corresponding Secretary, will be communicated through the medium of the organ of the Club, the American Farmer.

The Corresponding Secretary avails of this method to acknowledge from correspondents, and to inform members of the receipt of communications from the several distinguished gentlemen who were elected Honorary members of the Club, in April last, couched in the most gratifying terms, accepting the compliment, and preserving an uniformity of tenor, which gives earnest, at no remote future, that the Club will derive singular assistance, from their practical and scientific researches, in the economy of Agriculture.

COMMUNICATIONS.—In commencing a new volume we would remind our subscribers, that we shall be happy to receive communications from them upon any subject connected with the improvement of the soil, or the cultivation of crops.

We are sure that every farmer knows something which, if spread before the agricultural community, would prove of general benefit—and as such is the fact, we shall indulge the hope that we shall be favored during the current year with many valuable papers upon practical and scientific agriculture. If gentlemen engaged in our occupation would only devote a few hours each month to writing out the results of their practice, experience, and reflections, and forward them on to us for publication, a fund of the most useful information might be thus diffused, and blessings secured of countless value. In view of these benefits we beseech all to favor us with their communications.

AN AGRICULTURAL COLLEGE.

We are highly gratified to learn from the Farmers' Cabinet, that James Gowen, Esq. of Mount Airy, near Philadelphia, has purchased the beautiful grounds adjoining his residence, known as "Mount Airy College," and we are still more highly gratified to learn that he has in contemplation to establish an agricultural College, wherein the youth of our country may learn the business not only of farming, but that of Horticulture, practically as well as scientifically. And we are sure that every friend of Agriculture throughout the land, who may be conversant of the high attainments, the untiring zeal, and successful enterprise, which have ever distinguished this gentleman, will hail this announcement with feelings of unmingled delight; for who is it that know him but appreciate the well directed energies, enlightened views, and indomitable courage which he has displayed throughout all his laudable and more than successful efforts to improve the soil, elevate the moral and intellectual character of husbandmen, and expand the resources of the country.

We repeat it—we are gratified to learn that Mr. Gowen is about to establish an Agricultural College at Mount Airy. The location is most eligible, while the ample resources of that gentleman will enable him to call around him the best instructors to carry out the views of his own ripe and well digested mind.

Feeling a deep interest in the success of this enterprise, we call upon the Press of the country to take such steps as will spread a knowledge of its projection before the Agricultural community.

MARL.—We give in our present number, a valuable paper on the subject of Marl, being an extract from a letter from Ex-Gov. HAMMOND, of S. C. to the Corr. Secretary of the Agricultural Society of Jefferson Co., Ga. The discovery of beds of marl in our own and neighboring States, renders it necessary

that its great value should be properly appreciated—Its discovery in N. Jersey has been of more importance to the wealth and prosperity of that State than would have been the finding of the richest gold mines—The Earl of Leicester, by the means of Marl, was enabled to rescue an immense estate from a barren waste, and make it one of the richest in the kingdom.

We have the promise of a communication upon the subject from a correspondent, who is capable of giving much information thereon—which we expect to present in our next.

We learn from the Charleston Patriot, that Gov. Hammond's experiments this season, with marl, are attended with a remarkable degree of success. He has upwards of 2300 acres of his soil covered with it, which is likely to prove invaluable. Every body who sees the plantation of Gov. H., says the above journal, give up their doubts and opposition. 1000 acres of pine land, said to be originally very poor, are in corn, which, from present appearances, can scarcely yield less than 20,000 bushels—this is considered an immense yield in that section, for such a body, and all lying together, *spotted* as pine land usually is, and the Governor is of opinion that the land is very far from having reached its maximum yet; the impression is, that the beneficial results of marling will show themselves advantageously for 20 years. The effect of marl on his cotton crop, is equally as favorable as it is on the corn.

MONTGOMERY Co. AGRICULTURAL SOCIETY—This society held an adjourned meeting on the 1st June, and adopted a constitution for its government.—The following gentlemen were elected officers:—J. P. C. Peter, President; R. P. Dunlop, A. B. Davis, Geo. W. Dawson, Francis Valdenar and Dr. H. Wilson, Vice Presidents.—J. W. Anderson, Cor. Sec. and W. V. Bouie, Rec. Sec.—Robt. W. Carter, Treasurer—and W. H. Farquhar, S. C. Veirs, Jos. Bailey, Frs. C. Clopper, and Otho Magruder, the Executive Committee. It was determined to hold an Agricultural Exhibition in Rockville, on the 2d Thursday of Sept.

The Journal, in publishing the proceedings, says: "From the spirit manifested on the occasion, we conclude that success must attend the enterprise in which our farmers have engaged. An interest has already been excited upon this subject, which we regard as an earnest of great improvement in the agricultural condition of our county."

BENSON'S WATER RAM—It will be seen by the advertisement on another page, that Mr. Benson has taken up his residence in this city, for the better enabling him to supply orders for his Water Ram.

In our May number, in a short paragraph recommending farmers to sow a patch of Buckwheat, we incidentally recommended that the straw should not be thrown away, as is mostly the case, and added, that it made excellent hay for milch cows. This opinion of ours, advanced not only in a spirit of economy, but based upon a personal experience of some years in its truthfulness, and justified by the

best European authorities, is attempted to be controverted by a correspondent who signs his communication "C. H."

But to show him that we are not without good authority to back us in our own experience, we submit to the consideration of our correspondent the following extract from *Thaer*, whose testimony will perhaps have some weight with our friend:

"In many countries, buckwheat forms an important article of food for man; and, when cheap, is also used to fatten cattle and feed horses.—Its price falls very low in years of plenty, but rises again in seasons of scarcity. Cultivators who have the means of keeping it often lay it up in store; it is well adapted for this purpose.

The straw of buckwheat is much esteemed; it is wholesome and nourishing for cattle of all kinds. It should, however, be consumed before Christmas.

Indispensable as this plant may appear in some countries, its cultivation for grain is so precarious in others that we can scarcely venture to recommend it. As a fodder plant, however, it is excellent; and, when cultivated for this purpose, may be depended upon as well as any other plant. We may sow it as late as we please; the haulm is sure to be good, provided only that there be no danger of frost, and that the soil contain a moderate quantity of moisture. It may either be given to cattle as green-meal, or made into hay. It dries but slowly, but does not spoil when left on the ground without being turned. When treated by Klappmeyer's method, it is likely to turn out very good.

The cultivator who wishes to raise it for this latter purpose should choose a year in which the plant has been particularly successful, in order to obtain a good supply of seed; this, he will find, will yield him as good a return as any other. Buckwheat raised for this purpose may be sown on the stubble of a corn crop; or still better after vetches which have been mown early in the season to be consumed as green-meal.

A mode of proceeding which I have found to be perfectly successful is, to sow buckwheat in July, together with St. John's day rye;—then to mow the buckwheat in the green state, and reap the rye, when the grain is ripe, the following year. This may be done very advantageously on land which has borne a crop of vetches cut in the green state. Radishes may also be sown among buckwheat.

This plant is also well adapted for sowing, as a preservative crop, either with clover, or, still better, with lucerne. We shall have occasion to recur to this matter.

The produce of buckwheat as a fodder plant, is, however, very different, according to the circumstances under which it is grown. I have obtained crops of it, exceeding in weight those of vetches grown on the same soil, and to all appearance by no means inferior in nutritive power.

Some persons recommend a kind of buckwheat known by the name of Siberian buckwheat, (*polygnum Tartaricum*.) This variety has the advantage of passing the winter under ground. Two crops may, indeed, be obtained from it; but, after repeated trials in the open field I have found its produce so insignificant, and the crop, especially in the second year, so infested with weeds, that I cannot, by any means, acquiesce in the elaborate praises which others bestow upon it. In gardens, where it can be weeded, its growth is doubtless very fine.—*Thaer*.

THE NATIONAL EXHIBITION.

AGRICULTURAL MACHINERY AND IMPLEMENTS, AND MARYLAND MANUFACTURES EXHIBITED.

In resuming our notice of some of the articles within our category, exhibited at the late National Fair; we will premise our few remarks, by requesting our readers not to imagine, for a single moment, any casual omission or erroneous statement, to arise from any invidious sentiment, or local prejudice. Our means of information, beside some little practical knowledge of their uses, were limited to an hour's ocular inspection of a great number of machines; some few oral explanations from agents and inventors, elicited in response to our queries; their printed catalogues, and other similar data. Nor should such apparent oversight of many, already highly approved and extensively used machines and implements, give occasion of umbrage, as however agreeable the task to us, the mere recapitulation of all, would exclude every other article from our pages;—a course entirely at variance with that spirit of *jus gentium*, upon which the *American Farmer* has ever rested its claims to public usefulness and support.

Some time familiar with the productions of the several Lowell, Waltham, Dorchester, Middlesex, and many other Eastern Cotton and Woollen factories; and formerly, with several Virginia mills, in and about Richmond and Fredericksburg; our recent coup d'oeil of the entire panorama of our national mechanical skill, fully authorises us to aver, while according limitless praise to our northern brethren of the spindle and the loom,—Maryland is in the van of the march of improvement.

Conspicuous among the the numerous Cotton Factories of Maryland, the Laurel mills, under the vigorous and enterprising management of Col. Capron, are steadily progressing in all the branches of the art, essential to producing the more necessary, although less costly cotton fabrics. The village of Laurel, we remarked in passing, per railway, also betokens order, cleanliness and the successful application of judicious pecuniary outlay. While cheerfulness and contentedness,—features peculiar to the American system of factory life,—in the operatives, evidence a pure social atmosphere; which is the best guaranty of individual happiness and independence.

The Savage Factory; the Union manufacturing Company; the Patapsco and the Thistle factories have long been successful competitors, in yarns, osenaburgs and sheetings, with Eastern companies,—and it is not too much to say of them, that for strength of fabrics and evenness of warp and twist in their threads, they are still unrivalled.

Mr. T. H. Fulton exhibited cotton yarn and cotton cords, which elicited marked attention.

In the woollen branch, Messrs. Wethered & Bro's. claim especial notice—Laboring under the disadvantages of being "prophets at home;" the difficulties to be overcome in establishing a factory for fine

woollens, in our Southern states, and the immense outlay of capital for a private firm,—they have yet, by their perseverance and enterprise attained an enviable eminence in their art, and produced Cassimeres superior to the Belgian and German, and often equalling in elasticity and finish, the finest French and Scotch goods, of similar intrinsic value.

Having taken a very hasty, and, we are conscious, a very incomplete sketch of the manufactures of Maryland, we now proceed to glance at the several latest improvements and inventions, of Agricultural implements and machinery.

A very important apparatus in the economy of modern husbandry is the steaming process. Messrs. D. B. Smull & Co., Manufacturers, Balto., exhibited "Bentley's Patent Portable Steam Generator." This wonderfully powerful combination of elements, has now become a household god, and with the addition of the safety-valve, the pressure can always be confined within the resisting strength of the boiler, provided the water be neither permitted to boil below the lower, nor be increased above the upper guage.

We consider Bentley's patent the simplest, yet most efficient machine of the kind we have seen or heard of. The steam can be conducted through almost any number of casks at a time, arranged in a line, without additional fuel, and is applicable to kitchen culinary, as well as to the vegetable productions suited to the cattle yard.

The few remarks we shall have to make about Threshing machines, and their appendages, are just in season:

We consider no principle yet discovered, for the application of horse-power, superior to that adapted to Whitman's "Wrought Iron Rail-way Horse-Power;" and no combination of agricultural machinery equal to his Horse-Power and Thresher, with straw carrier and fan-mill attached, for economy of both manual and equine labor, and for expedition. We speak experimentally and advisedly.

Messrs. R. Sinclair, Jr. & Co., now manufacture a horse-power (Gray's) on the same principle generally, the axle of the band-wheel, being placed under the centre of the railway floor, which, it is said, assists in overcoming the friction. Both should carefully be examined by purchasers.

In this connection we might mention a new, or improved Sweep-horse power, by Mr. James Murray, Millwright, Baltimore; which is said to be of much lighter draught on the horses than this description of power usually is.—For many purposes and situations the sweep power is preferred.

Among the collection of Mr. E. Whitman, Jr. of Baltimore, are Messrs. J. T. Grant & Co's. Fan Mill and Grain Cradle. Their Fanning Mill it appears has taken the first premium at three last successive New York State Agricultural Fairs—at the last Mechanics' Institute and at the Pennsylvania Fair. They both chaff and screen at one operation, all kinds of grains and seeds, beans, peas, &c.—and require but little propulsive hand-power.

The Grain Cradle, although a comparatively trifling implement, it is very important should be well balanced, tight, yet not too heavy, with a clear sweep and strong fingers—the blade should also be of the best steel—That of the Messrs. Grant, seems to embrace these several requisites.

Pitt's corn and cob mill by the same agent, appears to be very complete, and is warranted to grind both "corn and cobs in any condition"—that is, "damp, green or dry"—very essential considerations. It also grinds, fine enough for stock, grain, beans and peas, without any alteration in the gearing.

The celebrated Prouty plough, of every size and description, also occupied a prominent position in Mr. Whitman's section.

Messrs. R. Sinclair, Jr. & Co., exhibited a great variety of late inventions and improvements. The now well known "Maryland" plough,—which for economy, durability and perfection of work, in all soils, cannot be excelled anywhere,—headed their catalogue. Also their Corn Mill, for grinding fine meal, chopping for cattle, &c.—farmers having these mills are at once independent of the miller. Their Corn and Cob Crushers are also admirably constructed, for preparing and economising the food of animals; if attached to a horse-power, we understand they will grind from 8 to 10 bushels per hour. They also exhibited about 30 Plows and Cultivators, all differently constructed.

But so extensive was their list, it would be impossible to mention everything; and so well known are these gentlemen for ingenuity and enterprise, commendation of ours would be a work of supererogation.

Mr. James Murray, Millwright, Balto. beside the Sweep horse-power already adverted to, exhibited a *Plantation Corn Sheller*, to shell 3,000 bushels of Corn per day—enough to feed all the chargers in the Augean stables and then relieve Hercules from cleaning them out! But it is true nevertheless.—A horse-power, French burr, grist mill—several sizes corn and cob crushers—a small hand corn sheller with a cob separator—a very important addition—also a straw cutter to cut five different lengths, by removing a sliding guage—all of which display vast intellectual and mechanical skill, and richly merit patronage.

Messrs. Gawthrop & Son exhibited a variety of Ploughs, among them Minor & Horton's celebrated Plough, so much used and approved of at the North.

R. Miller's patent, for cutting and grinding, or crushing Corn-fodder; is an excellent machine for the purpose.—By its use, the stalks and coarser parts of the fodder are *crushed*, so as to render them more readily edible and palatable. By removing one knife, the lengths can be doubled; cattle, we have found, generally preferring longer to very short provender. It also cuts straw, hay, &c. The Philadelphia Society, last fall, awarded the first premium to George Lay, agent for the sale of this machine, York, Pa.

Messrs. Pennock & Co., Kennet Square, Chester county, Pa. exhibited their Seed and Grain Planter, which appears to be at the same time, a very complete and simple machine.

The economy of labor is the *main chance* in agriculture, and *drill culture* is every day attracting more attention this side the Atlantic.—In other words, the quantity of yield per acre, with little, rather than the sparse production of a vast superficies, with much labor, is beginning to be properly appreciated.

We think we can recommend the patent of the Messrs. Pennock's, with confidence, as at least *approaching* the accomplishment of both these important considerations.

Should not Mr. Lay and the Messrs. Pennock have agents in Baltimore?

Among the manufactures from this city, in addition to those already mentioned, were Carpeting and Hearth rugs from C. G. Couradt.—Carpeting of cotton twist, covered with wool, by Chase's Card Spinner.

Messrs. John Everett & Son, and Jno. Kunkle, of Frederick Co. and Wm. Brown, of Carroll, exhibited admirable specimens of Leather—and Messrs. Jenkins & Lilly, and S. & T. H. Hunt, of this city, created quite a sensation by the exhibition of their Saddlery, Harness, and Trunks.

A beautiful Fire Engine, from this city, was there, and the Messrs. Dukehart exhibited specimens of their Hose, Fire Buckets, &c.

Messrs. J. R. & F. W. Marston, of this city, exhibited a rich collection of Glassware—and Messrs. Cortlan & Son attracted much attention to their Bathing apparatus—Mr. W. Duff, of this city, presented his Hydrostatic Safety Valve.

Messrs. S. Child, and Curlett & Son, exhibited splendid specimens in the Coach line, as did Mr. Butterworth of Tinware.

Messrs. Haywood & Fox, exhibited their Cooking Range, &c. Mr. Tarr, specimens of his Cabinet Furniture.

A Filtering machine, by Mr. A. G. Heckrotte, of Cumberland, and various chemicals by Messrs. S. & P. Ellicott, and A. G. Cole & Co. of this city, were presented for inspection.

The Reaping Machine of Mr. Hussey, and the Water Ram, by Mr. Benson, were there also from Baltimore.

Much attention was attracted to the splendid service of Silver ware from the establishment of Mr. S. Kirk of this city.

Mr. C. B. Calvert exhibited a number of his splendid Short horn Durham Cattle on the occasion, which were much admired, and some tempting inducements were held out for some of his cows, but as that gentleman is fond of the best of things, himself, he could not be induced to part with them.

In conclusion, as a Marylander, we feel exceedingly proud of the skill and enterprise of her citizens, in the advancement of art and the perfection of mechanical Science—while we are most happy to include some of our ingenious friends of a neighboring Commonwealth.

For the American Farmer.

Extract from the proceedings of the auxiliary to the Maryland Farmers' Club, Medley's District, Montgomery Co.—Monthly meeting, June 20th, 1846.—After the transaction of some preliminary business, roll being called, showed the absence of several members—President, Dr. W. BREWER, who, on taking the chair, said:

Gentlemen:—I cannot impress it too strongly on your minds the necessity of punctual attendance, during our meetings. It is the main duty of all—unavoidable circumstances only should prevent our being present. On the proper discharge of our respective duties as members of this Society, mainly depends its welfare, as well as the successful consummation of the great object in view,—the diffusion of agricultural knowledge, founded on science, and tested by practical experiments. To effect such a praiseworthy undertaking, requires the collective and unanimous action of all, particularly as some of the principles on which we act, are but comparatively known, by the generality of farmers—hence, we have to encounter the prejudices and opposition, attendant on the introduction of any thing new, or differing with systems, which practice and antiquity generally render familiar, producing an opposition to any change, so much however, it may be required. But gentlemen, it must be apparent to all, that the apathy which generally characterized the farming class some little time ago, in adopting improvements, and studying their profession scientifically, is, in a great measure, retreating before that diffusion of agricultural knowledge, which has emanated from associations, similar in character to the one over which I have the honor to preside. And permit me to add, that in proportion as you prove to the community by your practical experiments, the superiority of your mode of agriculture, over your former system, will you tend to remove all opposition to their general adoption.

As the member who is to address the Society to day, has not yet arrived, I would call your attention to a subject, which, in my opinion, does not receive that consideration from farmers to which it is justly entitled—I mean ploughing. It is a business—the practical part of which few tillers of the soil will hesitate to perform, yet how few there are, who properly understand its theory, or reflect on the many benefits resulting from a mode different from the skinning process generally pursued. Deep ploughing, gentlemen, in my opinion, is absolutely necessary, particularly for corn—the great extension of its roots—the amount of moisture to be supplied, the constant supply of oxygen to act on the humus of the soil, converting it into carbonic acid, together with the inorganic elements required for its formation, are all increased by deep ploughing—hence, I would urge on you the advantage of using the sub-soil plow. Experience has so far proved to me the benefits resulting from its use. Loosening the soil to the depth of 12 or 16 inches—permitting the oxygen of the atmosphere to act on the various basis, converting them at the same time to substances fitted for the assimilation of the plant, cannot but have a tendency to increase the amount of vegetable matter—but time will not permit any longer to pursue this interesting subject.

N. T. Hempton, Esq.—Mr. President, I regret very much that I cannot respond to the wish of the Society, who at a former meeting, appointed me to deliver the usual monthly address to day; nothing but a thorough

conviction of my inability to treat of any subject scientifically, so as to merit your attention, restrains me from complying—yet sir, to prove that I am willing at all times to discharge to the height of my power whatever duties the Society may assign me, I shall proceed to state to them the course which I pursue, in raising potatoes; my success in this crop for a series of years, has somewhat tended to awaken inquiry among some of my brother farmers, less successful; for their information I would state that I mostly select a good fallow sod, manure it well early in the spring, or fall, with good manure, either barnyard, or compost, plough pretty deep, harrow immediately. When about to plant, I cross-plough, harrow, then drill about 3 feet apart—plant the sets about 10 or 12 inches apart in the drill, cover lightly, seldom manure in the drill—prefer applying the manure broadcast, previous to first breaking up. I generally select my best potatoes for seed, cut those that will admit, roll in plaster and plant in the old of the moon, the first or second week of June, as the case may be—keep them clean of weeds whilst growing, plough twice, never after they get in blossom—I seldom fail of raising a good crop. My success I mostly attribute to the time I select for planting, together with the influence of the moon. I am fully aware that I subject myself to the ridicule of the learned, by attributing any agency to lunar phases in the cultivation of this esculent—yet such a belief is more rational when confirmed by experiments, than its rejection on the opinions of those more favoured with book-learning, but unable to assign any reason for the non-existence of such an agency, which in my opinion exercises great influence on all organized substances.

President.—That the moon is the chief cause of tides and change in the weather, and that it has considerable influence on the animal kingdom, is generally admitted, but that the power supposed to emanate from her when in a certain phase, would still continue to affect the plant during its growth, though, alternately acted upon by a counteracting effect from the same source, seems somewhat contrary to reason.

Mr. H. Young.—Though we may be at loss, to point out the course, or assign a reason for those apparent operations of nature, by lunar influence, yet, such facts have come under my own observation, as fully to confirm me, that due regard, should be paid to her signs by the farmer in many of his operations.

Mr. Joseph Bruner.—I fully agree, in attributing to the moon great influence on plants, and he who also wishes to be successful in raising roots, must consult her signs, a practice, followed for centuries by some of the best of farmers, at least proves, that if it is an error, it has been adopted by many.

President.—All causes considered by the farmer, as tending to advance the amount of his crops, should be carefully attended to; even if some of the more considered hypothetical, it affords him pleasure to reflect, that nothing has been neglected by him, to assist nature in her operations.

P. H. McLeod.—Is the system which you have stated to the society, the only one pursued by you in the raising of your potatoe crop?

Mr. Hempton.—No. I have succeeded equally as well on more occasions than one, when I cut off of the ground (I intended to plant) a crop of clover-hay—manured, ploughed, harrowed, and planted as before stated—my father was in the habit of planting a small lot of ground annually, and though manured, it finally got tired and would produce no longer—I sowed it in clover—when full grown, plowed it

under, and planted my potatoe crop thereon, and succeeded well.

Mr. *George Brewer*.—Do you make any difference, as regards the sort of manure which you apply?

Mr. *H.*—Barn-yard manure will answer very well, when you break up early in the spring—compost, if you do not plow a second time.

Mr. *McLeod*.—How did you succeed last year, being so remarkable for the general failure in that crop?

Mr. *H.*—On 44 yards square, I raised 150 bushels of good sound potatoes—not so bad for the season.

Mr. *Mathews*.—What do you consider as the cause of the lot mentioned getting tired and failing to produce as usual, when supplied with manure?

Mr. *H.*—I supposed the manure had ceased to act or to afford that nourishment required by the plant, like the effect, or rather the want of an effect, which is observable on lands where plaster has been annually applied.

Mr. *Mathews*.—I rather think the failure to produce, arises from the inorganic elements being exhausted in the soil, or at least those required for that crop, this together, with the excrementitious matter supposed to be exuded by the plant, accumulates in the soil, which is totally unsuited for the assimilating of the plant which produces it—to destroy its noxious qualities a change of crops, or fallow is required; the latter is better, since it restores the inorganic elements, or increases their amount by the action of the oxygen of the atmosphere, aided by the acids of the soil, which again renew the alkalies.

Mr. *Joseph N. Chinnell*.—I do not think the application of plaster, applied at the rate of half a bushel or a bushel per acre, every other year, causes it to cease having the desired effect. The mistake arises from not perceiving the benefit of its application so plainly, as when first applied—hence the general conclusion of some farmers, that enough has already been applied.

Dr. *N. Brewer*.—Few duties of the husbandman require a greater degree of study and research, in order to understand it properly, than that connected with the application of those substances termed inorganic. Though they exist in small quantities in the plant, (when compared with its organic) yet is their presence necessary in the plant, otherwise a full development of all its parts cannot be expected. Indeed the sterility of most lands is owing to an absence of these elements; where they exist plentifully, the farmer seldom fails in raising good crops—hence the propriety of being able to analyse the soil, to ascertain its constituent parts.

Mr. *McLeod*.—Before we adjourn I would respectfully call the attention of the Club to a subject which I consider merits their favorable consideration—I mean, an effort for the more general diffusion of the "*American Farmer*," published by Mr. Sands, of Baltimore; a work which merits the patronage of every Maryland farmer.

Its cheapness, well selected matter, and the general directions for the work of the month, are recommendations entitling it to find the way to every man's library, but more particularly to the shelves of those gentlemen constituting this association. Its being made the organ of the parent Club, in Baltimore, imposes a degree of necessity of increasing the number of copies to at least 15 or 20. Should such a course meet the approbation of the society, I shall use my best efforts to carry the same into effect.

President.—I consider the suggestion a very laudable one.

It meets my hearty approbation, and I sincerely hope that each member will so far respond to the proposal as to place the *American Farmer* in the hands of all.

Mr. *Joseph White*.—It affords me pleasure to state to the society, that I consider it a work well worthy the patronage of all who are desirous of keeping pace in agricultural improvements.

A MEMBER.

OYSTER SHELL AND STONE LIME.

To the Editor of the *American Farmer*.

Sir: I see in your paper an article on Lime, and the comparative qualities of Oyster-shell and Stone Lime, and the puzzle that it would make for the best analyst to answer the question negatively. I would be glad to see another illustration made, and that is, why the lime made of the blue stone for agricultural purposes, is so much superior. This is a fact too long known to be denied; and it is also a fact that it may lay upon the land one foot thick, and still the grass will grow through the pile and flourish finely, whilst the more pure lime, or that made from white stone will kill all vegetable matter upon which it lays. The farmers of Chester and Delaware counties, Pennsylvania, have tried the experiment with both, until they have satisfied themselves that the lime made from the blue stone is far the best, for agricultural purposes, while for making mortar, the white has greatly the preference. Query, would it not be well for Agricultural Societies to appoint a committee of enquiry, with a good chemist at their head, whose duty it should be to analyze the different limestones, and report their contents. In Harford county, there is a blue limestone that it is with difficulty it can be burnt without smelting it, in consequence of the great quantity of impurity contained; and the lime of that stone will act immediately and produce vegetable matter in abundance, and certainly the agricultural community would like to know why. I for one would, and would be ready also to pay my proportionate share of the cost for the information. Yours, &c.

C. H.

METEOROLOGICAL TABLE, FROM 25TH MAY, TO THE 27TH JUNE.

Kept at Schellman Hall, near Sykesville, Carroll co. Md. Taken at 6 o'clock, a. m., 2 o'clock, noon, and at 6 o'clock, p. m.

Wind.		Temperature.		Remarks.	
28 W	W	68	75	70	Foggy Cloudy
29 E	E	63	64	64	Fog, Cloudy, fine rain, Cloudy.
30 E	E	59	65	65	Fog Clear Cloudy
31 E	SE	63	74	73	Cloudy
1 E	E	66	73	72	Cloudy
2 E	W	69	80	75	Rain Clear, Gust
3 W	W	61	78	73	Clear
4 W	W	67	83	75	Clear, Gust 3-4 in., Clear
5 W	W	73	81	70	Clear, Gust 1-2 in., Clear
6 W	W	61	75	68	Clear
7 W	W	64	70	66	Clear
8 S	S	62	71	67	Fog, Shower, Clear
9 E	E	68	68	64	Clear, Cloudy Rain
10 NE	NE	59	70	67	Cloudy,
11 E	E	64	67	65	Rain
12 NE	NE	63	63	63	Rain 1 inch
13 NE	NE	57	63	62	Fine Rain
14 E	SE	61	75	70	Foggy, Cloudy, Clear
15 NW	W	67	79	76	Clear
16 W	W	68	81	78	Clear
17 E	N	65	77	75	Fog Clear
18 W	W	68	79	75	Foggy Clear
19 SW	W	69	81	75	Fog, Clear, 2 gusts 1-4 in.
20 W	W	69	80	75	Clear
21 WNW	NW	63	69	63	Clear
22 WNW	NW	58	70	68	Clear
23 NW	W	56	70	68	Clear
24 N	N	58	69	73	Cloudy Clear
25 W	W	62	78	75	Clear
26 W	W	65	81	76	Clear
27 W	W	68	81		Clear

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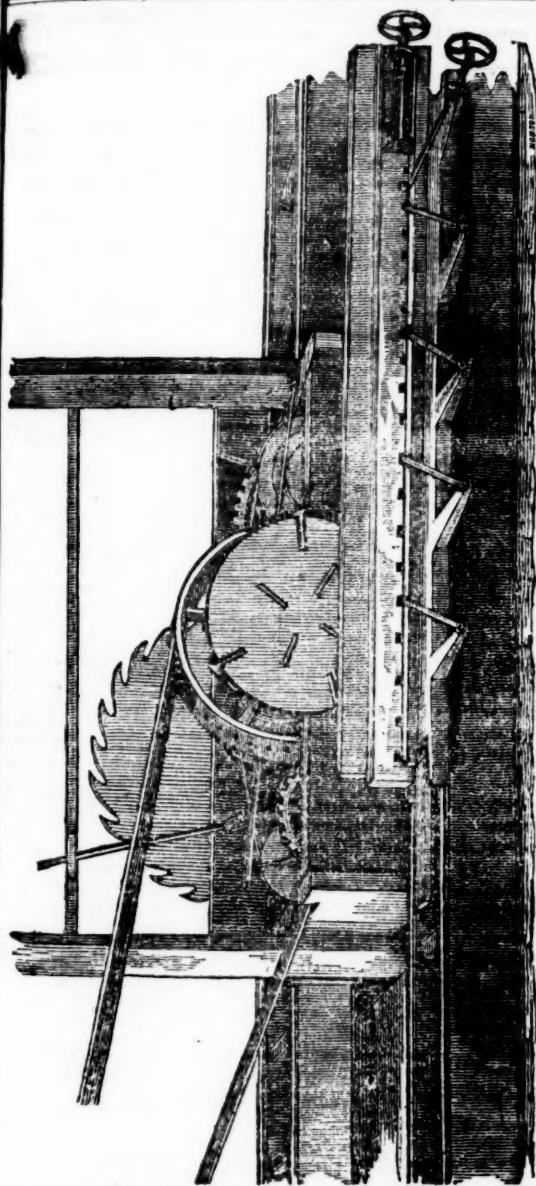
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PAGE'S SAWING & PLANING MACHINE COMBINED.

In a visit which we made some months since, to Riverdale, the beautiful estate of the Hon. Chas. B. Calvert, near Washington City, our attention was arrested by the operation of one of Page's Portable Saw Mills which Mr. C. has had in use for several years,—and although we had frequently seen the mill set in motion at the premises of the inventor, yet we never had enjoyed the opportunity of witnessing its performances to advantage, as in the nature of the case, it could not be operated with the same facility there, as it could be whilst placed in the forest with all the appliances annexed to it for full work—much, however, as we had before admired it, we were on the occasion alluded to, delighted with the performance, and we determined to call the attention of the public more immediately to its great value, through the columns of our journal.

This Saw Mill is, what its name imports it to be, a portable machine in every sense of the term, as it can be removed in a common wagon drawn by 3, 4 or 6 horses, oxen or mules, from one part of the woods to the other, or wherever else its services may be required, and put in operation again without delay or difficulty, thereby saving the heavy, tedious and difficult operation of transporting large logs. It is owing to the strength of its construction, not easy to get out of order, and its great simplicity, places its repair within the ability of any country carpenter or smith of ordinary capacity. To say that such a machine would prove an invaluable acquisition to any gentleman owning timber lands convenient to market, is not to claim for it more than it deserves.

The cost of one of these Portable Saw Mills for sawing lumber 12 feet long, including a 4 feet saw, is \$300. For all lengths over 12 feet, which it may be desirable to cut the lumber, \$3 per foot extra.

Washington Arsenal, D. C. August 18, 1842.

Mr. Geo. Page,

Sir,—In compliance with your request to give you a few lines relative to the machines that you have put in the carriage maker's shop at this place, viz: one Planing Machine, one Circular Saw Mill, (both working together and at the same time,) one Tenon Cutting Machine, one small Vertical Saw, one one Turning Lathes made of cast iron, and working

At the city of Washington, the U. S. Army Department has bought one of these Saw Mills, together with certain other machinery, to be worked in connection therewith. We give the annexed certificates from the highly intelligent mechanics having charge of their operation. The approbation of such men, combining both practical and scientific knowledge as they do, speaks volumes.

with an endless chain, I take pleasure in stating that *that they are all good machines; that they work well, and also that they are valuable to any establishment that has sufficient business to employ them.*

J. S. MILLER, Master Carriage Maker.

I fully concur in the above statement made by Mr. Miller.

SAMUEL BYINGTON, Blacksmith.

P. S.—The saw used in the above mentioned Saw Mill, is 42 inches in diameter, and has been in operation about seven months, and from the experience which we have had during that period, we are fully satisfied that three horse power is all sufficient for all ordinary sawing, and that five horse power is sufficient when the Saw and Planing Machine are in operation at the same time.

We omitted to state that the morticing Machine for naves, and that for ordinary work are the best that we have seen; they work very accurate, and that a man can with great ease perform double the work that he can in the ordinary way by hand.

J. S. MILLER,
SAML. BYINGTON.

The Hon. Thomas Hart Benton, the distinguished Senator from Missouri, who has had one of these Saw Mills on his plantation in Woodford County, Kentucky, for about two years, thus speaks of its performance in a letter from which we make following extract:

Mr. George Page.

DEAR SIR,—I comply with your request in stating the performance of the Circular Saw Mill I bought of you and placed on my farm. It is cutting better than you promised it should, and is now at work under the care of Mr. John W. Duncan. It is driven by six horses and cuts ash, oak, walnut and other hard wood at from six to twelve feet per minute, according to the thickness of the timber. Ten or twelve feet to the minute in a thickness of one foot is common work. She will cut her half depth, say twenty one inches, at that rate, giving a smoothness of surface and a truth of line which gives a beautiful appearance to the lumber, and great comfort and advantage to the workmen in working it up. In a word, the Saw exceeds your promise; a very unusual thing in a patentee—and I hope you may be remunerated for this and other ingenious and useful mechanical inventions, which place you in the class of public benefactors, and entitle you to the thanks, encouragement and good wishes of the community.

Yours Respectfully,

THOMAS H. BENTON.

In giving the above extract from the letter of Col. Benton, it may not be inopportune to introduce the remark of another distinguished gentleman, who visited the estate of Col. B. in November, 1844, and saw the Saw Mill in operation. We allude to the Hon. G. M. Boyer:

He says that he "saw the mill sawing white ash flooring plank at the rate of 12 feet to the minute, throwing off two boards at a cut, each 6 inches wide, giving a smooth surface and true line, and working to the admiration of all who saw it."

Extract from a letter from Thomas Neill, esq. of Sandusky county, Ohio—his letter bears date Nov. 20, 1845:

"Last week I sawed 1,151 feet $\frac{1}{2}$ inch boards in 5 $\frac{1}{2}$ hours: the day was excessively warm, and so far from hurrying the horses, we repeatedly stopped and lost from 15 to 20 minutes. I never have more than one hand besides myself, and he, a boy, to drive, except the logs are very large. We generally use 5 or

6 horses, and they are not better than 4 Maryland or Pennsylvania horses."

From the Hon. Chas. B. Calvert, of Riversdale, Prince George's County, Maryland.

Mr. George Page,—

SIR,—Having had one of your Portable Saw Mills in operation on my estate, near Bladensburg, Prince George's county, for several months, and being fully convinced of its great and paramount merits, as a superior labor-saving machine, I take especial pleasure in bearing testimony to its value. The Saw Mill I have now in use is propelled by a steam engine of ten horse power, and is attended by six hands. With this power of steam and number of laborers, I have cut at the rate of 15,000 feet of lumber per day, and it has given me no little satisfaction to find the lumber cut with so much ease and exactness, and the Mill and its machinery so little liable to get out of repair. Such, indeed, is its simplicity, that I find no difficulty in having it tended by my ordinary farm hands; nor would I find more, should it get out of order, in having it repaired by an ordinary blacksmith, or country mill-wright. Destitute of every thing like intricacy or complication in its arrangement, and having great strength of construction, there is but little fear to be apprehended of its getting out of repair, and these qualities, when viewed in connection with its truly portable size, renders it of immense value to gentlemen owning forests of timber, as the facility with which it may be transported from one point to another, as the timber may be felled and sawed up, enhances its value in a degree that cannot be too highly appreciated. I believe that, if it were necessary, I could remove it twenty miles in a single day, with a team of four, six or eight horses, according to the nature of the road, or ground, over which it would have to be transported, and have it ready to operate within the course of the third day thereafter.

When I look at it in full operation; see its wonderful powers, the ease with which it executes its work, I am struck with surprise, that a Machine so simple in all its parts, had not been invented a century ago. It is, indeed, a labor-saving and time and money economising invention—one which, in my opinion, every owner of a woodland estate, every rail road company and shipwright, in the country, ought, without delay, to possess themselves of. As it can be propelled equally well by steam, water, or horse-power, it will suit every location, and prove, in either, a machine of intrinsic value, whether regard be had to the saving of money or time, which latter is of equal value with the former. In new settlements too, where there is timber, it would prove a God-send to whole neighborhoods, as it might be removed to any point where buildings might be required to be erected.

CHAS. B. CALVERT.

IMPROVED WHITE WASH.—Slack lime in hot water; add six lbs. dissolved glue, one lb. Spanish whiting, and one pint of salt. The mixture should be applied hot. No degree of dampness has the power to affect the brilliancy of this wash, and it will endure unimpaired for years.

TO PREVENT THE SMOKING OF A LAMP.—Soak the wick in strong vinegar, and dry it well before you use it: it will then burn sweet and pleasant, and give much satisfaction for the trifling trouble in preparing it. Lamp smoke is not only disagreeable to the smell, but hurtful to the lungs.

HORTICULTURAL.

WORK IN THE GARDEN.

As nothing around the homestead adds more to its beauty, or contributes more to the substantial comforts of a husbandman's family than a well arranged garden, it shall be our duty to point out those things which it appears to us should be promptly attended to.

Cabbages—If you have not done so already, you should without further delay, set out your cabbage plants for your fall and winter supply of this excellent vegetable. When placed out, see that they are kept clean and the earth open at all times to receive the full benefits of the rain and dew.

Melons of all kinds, as well as Cymblins, must be kept clear of weeds.

Fall Pickles.—It is time that you were preparing your beds for planting all kinds of vegetables intended for fall pickles and mangoes. In the preparation of your beds recollect that the great essentials to success are plenty of manure, deep spading, fine tilth and cleanliness after the plants come up until laid by.

Late supply of Peas.—If you have not done so already, and desire to secure to your family a supply of late peas, you may effect your object by planting a few rows of marrowfats.

Late Beans either for pickling or family use may be planted now.

Cauliflowers.—The plants of this delicious vegetable should be set out as speedily as possible. By doing so you may secure a supply for use during fall. As the plants are tender, after placing them out should a drought ensue, you must be careful to water them each afternoon just before sunset, and if possible, with running water, or such as may have been exposed to the sun throughout the day.

Small salading of all kinds may be sown during this month. The best location will be on a border protected from the rays of the sun. To secure a continuous supply it will be best to sow at intervals of a few days, say a week apart during the month.

Celery—It is time to set out your celery plants—and while doing so recollect that unless a rain should immediately come that they must be watered every afternoon before sundown.

Radishes and Lettuce.—Sow the seeds of each of these at intervals of a week apart for a month to come to secure a continued supply through the latter part of summer and fall.

Tomatoes, Egg Plants, Vegetable Oysters, Okra.—These vegetables must be kept clean and the earth well open to the action of the atmosphere.

Potatoes.—Keep them clean of weeds, and as a preventive, strew a mixture of lime, salt and ashes over the vines—do it in the morning, while the dew is on them, so that the leaves and stems as well as the earth may derive benefit from the application.

Carrots, Parsnips, Beets.—Stir the earth around these and free them from all grass and weeds.

Leeks, Shives, Shallots—These excellent pot herbs may now be transplanted, taking care to water them for a few days, and until a rain shall come.

Pot and Medicinal Herbs should be gathered towards the latter end of this month and dried for winter use.

Cherry, Plum, and Apricot Trees.—This is the right month for budding these fruits.

Pears.—This is the proper time for inoculating

pear trees. These operations succeed best in cloudy weather.

Garden Fruit Trees.—These should be treated as we have recommended the apple trees should be.

Peppers.—Keep these clean and the earth open.

Onions.—Pass your hoe freely through the rows, but do not hill up the roots. If they should be attacked with the worm, as is sometimes the case, give them two or three free waterings with soap suds in which a good portion of salt has been dissolved.

As we have at the conclusion of our Farm memorandum wished prosperity and happiness, to our male patrons, we must not be so churlish as to close our conversation with the presiding geniuses of the garden, without saying from the deepest recesses of our heart, we wish them the possession of all things on earth which contribute to the happiness of the virtuous and the good—and that while temporal blessings uncounted may be strewed across their pathways, that those of a higher and more spiritual nature may in the fullest measure, be bestowed.

The following interesting letter from Dr. Thompson, has been sent to us for publication; it originally appeared in the Southern Planter.

THE PEACH TREE.

Mr. Editor,—As the season of the year is at hand for transplanting peach trees and setting out orchards for the production of this luscious fruit, whether for family use or the supply of the city markets, it occurs to me to redeem the promise I made you and several of my Richmond friends, last spring and now, to give some account of the introduction and cultivation of the peach tree in Delaware. I do this, the more readily, as I may impart to you some useful information, and through your widely circulated journal answer many queries put to me (and which I have not found leisure to reply to) by several gentlemen in the more Southern and South Western States. Before I do this permit me to call your attention to a publication in the last January number of the "Planter," with a view to its correction of a notice on the "profits of raising fruit" in Delaware. "The product of one large peach orchard in the little State of Delaware was sold last year to a company in New York city for fifty thousand dollars, and it is said the company realized sixteen thousand dollars profit by the operation.—From the same orchard fruit has been sold to the amount of one hundred thousand dollars." All of which, for the sake of truth and on behalf of our extensive peach growers, I must protest against, and pronounce a mistake—an over-wrought picture, much too highly colored, and calculated to mislead and disappoint the public mind. In contradiction of the statement alluded to, I am supported by Mr. Isaac Reeves and Mr. Philip Reybold, Jr., two of our largest and most successful cultivators of fruit, and will only add, whilst on this subject, that the owners of our large orchards never lease them out, but market their own crops by steamers or schooner boats, generally chartered by the season or month, and that from the profits of sale, all the expenses of cultivation, picking, transportation and the interest on the land, must be deducted, to a large amount, which will lessen very materially the net proceeds of the most extensive orchards. Though in the early stages of the business the profits were great, yet in the rapid increase of orchards and production of fruit, they

have much diminished, but are still handsome to those most extensively engaged at present. To Mr. Isaac Reeves, a native of New Jersey, is the whole credit due of first introducing on a large scale the culture of the inoculated peach tree into Delaware. The late Jacob Ridgway, of Philadelphia, owning a farm near Delaware City, on the Chesapeake and Delaware Canal, was induced by Mr. Reeves to become his partner, and upon this property, in the spring of 1832, they set out the first twenty acres of inoculated peach trees ever planted in this State, with the view of supplying the Philadelphia market. They rapidly extended their plantation to about one hundred and twenty acres—were eminently successful, and one year—the very best season they ever had—their gross income from the sales of fruit was some sixteen thousand dollars. Peaches then commanded from one dollar twenty-five cents to three dollars per basket, containing about three pecks each. In the spring of 1836, the late Mr. Manuel Eyre and myself followed suit upon our "Union Farm," midway between Wilmington and Newcastle on the Delaware River, to about the extent of one hundred and forty acres. In a year or two afterwards, Mr. Philip Reybold & Sons went into the business—then a host of others, until now, from twenty-five hundred to three thousand acres of land, in Newcastle county, are planted with, and successfully cultivated in peaches—making Delaware, though the smallest of the States, the largest producer of this fruit. The result has been a proportionate diminution of price, the average, per basket, one season with another not exceeding from thirty to sixty cents. In this way Delaware has become the principal supplier of the Baltimore, Philadelphia, New York and North River town markets, and many of our fine peaches now reach Boston.—The whole annual income from this branch of business to the farmers of this county may be estimated at from one to two hundred thousand dollars. For so handsome an additional product the agriculturists of Delaware, as well as the consumers of peaches in our vicinity, owe a debt of gratitude to the originator of the culture, which as one, I should gladly unite in presenting with some valued and lasting memento in recognition of his merit for giving a new staple to a State; for who is a greater benefactor to mankind and the age he lives in than he who brings into operation a new branch of business, gives, by his enterprise and perseverance an impetus to agriculture, causes the earth to give forth its increase, and so multiplies its fruits as to bring them within the reach and enjoyment of all? The great improvement made in peaches within the last few years in New Jersey and Delaware, consists in propagating none but the finest kinds, by budding and grafting, so as to have the fruit as early and as late as our latitude will admit of, the earliest ripening with us from the first week in August, such as Troth's Early, Early York and Early Ann, and ending in the latter part of October with Ward's Late Free, the Heath, Algiers' Winter, &c. I need not take up your time now with enumerating all the different varieties used and planted out to keep up this succession—some of the principal ones are in the order of enumeration: Troth's Early, Early York, Early Ann, Yellow Rareripec, Red Rareripec, Malacatoon, Morris' White, Oldmixon, Rodman, Ward's Late Free, Mulden, Free Snock, Late Rareripec, Heath, Algiers' Winter, &c. These trees are generally obtained for about six dollars per hundred from approved nurserymen in Delaware and New Jersey, and the rearing them constitutes a distinct business of it-

self. They are produced by planting out the peach stones, or pits, in the spring, which have been slightly covered with earth in the fall, so as to be exposed to the action of the winter's frost. The sooner the pits are put in the sand or earth after the fruit is matured, the better—they should never become dry. The shoots from these stones are budded in August of the same year, from four to six inches from the ground. The ensuing spring all the first year's growth is cut off above where the scion has taken—not, however, until it is well developed—when, in the fall and following spring they are ready for transplanting or sale. The mode of preparing the ground for them is precisely that with us of the Indian corn crop—the earth is well ploughed, and from thirty to forty bushels of lime is spread upon it to the acre. The trees of like kinds (for the convenience of picking) are then set out in rows at distances varying from twenty to thirty feet apart, according to the strength of the soil; a crop of corn is then put in and cultivated in the usual way, and this is done successfully for three years; by this time the trees begin to bear. The cultivation of the corn being the proper tillage for the trees, and this crop amply paying for all investment in trees, &c. After the trees commence bearing, no other crop of any kind should ever be grown amongst them, as I have known two rows of potatoes between a row of peach trees not only to affect the fruit, but seriously injure the trees; but they should be regularly ploughed some three or four times in the season just as if the corn crop was continued. So obnoxious in our country is the peach tree to the worm, or borer—the *argyrota exitiosa*—that each tree in the orchard should be examined twice a year, summer and fall—say in June and October—by removing the earth down to the roots, and killing with a pruning knife, every intruder—then scraping the injured bark and removing the glue. Thus exposed, they should be left for a few days, when the earth should again be replaced with a hoe. The limbs should be only moderately pruned, or thinned out, so as to admit the sun and air, avoiding in the operation leaving forks, which incline them to split when burthened with fruit. When the peaches ripen, they should be carefully picked from step-ladders, seven to eight feet high, into small hand-baskets, holding one peck each. Our operators for this purpose are both men and women, who earn from fifty to seventy-five cts. a day, besides being found. These baskets are gently emptied into the regular market baskets, which are all marked with the owner's name, and strewed along the whole line of orchard to be picked. As these are filled they are put into spring wagons, holding from thirty to sixty baskets, and taken to the wharf, or landing, where there is a house, shed or awning, for the purpose of assorting them, each kind by itself, which is into prime and cullings—the prime being distinguished not only by their size and selection, but also by a handful of peach leaves scattered through the top. They are then put aboard the boats in tiers, separated by boards between, to keep them from injury, and so reach their destined market. We consider a water communication from the orchards, or as near as may be, most essential, as all land carriage more or less bruises or destroys the fruit. Our roads through the orchards and to the landings are all kept ploughed and harrowed down smooth and even. The baskets for marketing the peaches are generally obtained in New Jersey at from twenty-five to thirty-seven dollars and fifty cents per hundred. With trifling modifications our culture and practice may

be made to suit not only the Southern but the South-Western States. I may here perhaps, properly remark that the average life of our trees is from nine to twelve years, when properly cared for and protected, as I have described.—That the two great and devastating enemies the trees have to contend against are the “peach worm” and the “yellows;” the first readily yielding to the knife and the treatment of semi-annual examination; the latter being a constitutional, consumptive, or miasmatic disease, for which no other remedy is as yet known or to be practiced but extirpation and destruction. There are many theories and some practice recorded on this, by far the most destructive enemy of the peach tree. I may hereafter give my own views on this particular and obscure disease. I concur, however, with Mr. Downing, of Newburg, that the great and prevailing disposition of the peach tree in our climate is to over production of fruit in favorable seasons. Our remedy for this is to carefully thin it off by plucking all those that touch, or are within two or three inches of each other, when the size of hickory nuts, which are thrown into some running stream or into the hogpens to be devoured. His mode “of heading in,” or pruning one-half of the producing buds, is new to me, but which I have just tried upon my garden trees in the city, and will be able to speak of, *experimentally*, hereafter. With us in Delaware, as every where else, the peach tree succeeds best in a good soil. That preferred is a rich sandy loam, with clay. Many of my finest trees and choicest fruits are grown on loose and stony soil. The trees should never be set out in wet, low or springy situations, and from the same reasons, high and rolling ground should be selected for your plantations, and for the additional circumstance that they are less obnoxious to early frosts. I have no doubt of their full success upon such as I visited upon the “falls plantation,” of Mr. Marx, near your city, the estates and high grounds of Mr. Richard Sampson, and such as I saw at Piconokee, Tuckahoe, and upon other similar sites on the James and Chickahominy rivers. I may further remark, for the benefit of those desirous to pay some attention to the cultivation of peaches, (and who should not be?) that considerable additions of new and valuable varieties, native as well as foreign, are annually being made to those already known among us—many of them very fine. I have now several hundred raised from pits, imported for me by N. Frazier, Esq., Buenos Ayrean Consul, of Philadelphia, and long a resident merchant in that city, many of which will bear this year and next. To Mr. Sayres, of Sparta, Georgia, I am also indebted for a full sample of the native Georgia varieties, as well as to some other gentlemen in different States—all of which I mean to test and bring into notice, if of sufficient value. Whilst in the vicinity of Richmond, Norfolk, Fredericksburg, Petersburg, Winchester, and other large towns of Virginia, the peach tree may be cultivated with profit for the market, and all over the State for the purpose of drying, every farmer and owner of a lot may raise them in abundance for his own use. But I am persuaded that the best fruit crop that Virginia farmers could raise is the apple—the *pippin* apple, with perhaps some other of the finest fall and winter varieties; they will bear transportation—always command a good price, and be saleable in our middle States and Northern markets; and find a ready sale in London and Liverpool.—The very best and fairest I have seen for years was during the past winter, the growth of Clarke and Jefferson counties, Virginia. But I am digressing from the object of this

letter, in going from the peach to the apple, yet I am induced, like Mr. Lawrence in his late valuable letters to Mr. Rives, in saying *what old Virginia may be*, to stir her up and “provoke her to good works,” if she would take into serious consideration all the advantages of her location, climate and natural resources. For her extent of territory, mineral wealth and productive capacities, she is unequalled by any of the old or new States, to accumulate riches and support a population worthy of her ancient fame. But here I must curb my thoughts and repress the feelings and expressions that seek vent in addressing her sons on a specific subject. Two weeks spent in Eastern and two in Western Virginia within the past year, would prompt one of her native sons in another State, and under other influence, to say to her more, if not *half as well*, as Mr. Lawrence has recently said of what she is—of what she is capable, and what she ought to be. But he must refrain; whenever she shall inquire and seek to apply the proper remedy to the disease and answer the interrogatory, why her population is so sparse?—why her mines, her water-powers and her agricultural abilities are not fully developed and made profitable?—he may be inclined to give an opinion for what it is worth. Under this correction and change of many of her present disabilities will she be able to augment and maintain a population adequate to give her enough children and near enough to her free schools to be educated. Then, and not till then, will capital force in upon her lands, work her mines, build up factories, establish internal improvements, and will commerce be enabled to come to her and bear away to foreign climes her surplus products. The bright suns of more than two centuries have risen and set upon her, since discovery and civilization placed her first among the favored of States—the birth place of the father of his country, the mother of Presidents and a host of revolutionary heroes. Why she is now inferior in population, capital and political strength to many of those junior sisters she helped to nourish and bring into existence, it well behooves her to inquire. Whilst all are assured that she has the means, power, and appliances within herself, to rectify the evils that oppress her, and to hand down to her latest posterity, whole and unimpaired, the inheritance she possesses, let her put her own shoulder to the wheel, and then call upon Hercules to help her.

For all digressions from the main subject of this communication I plead a filial regard and birth right privilege when addressing the household of my ancient mother.

Yours, &c.

JAMES W. THOMPSON.

Wilmington, March 26, 1846.

C. T. BOTTS, Esq.

FLORICULTURE.

WORK FOR JULY.

Prepared for the *American Farmer*, by Saml. Feast, Florist.

Canellias should be syringed frequently, and receive moderate supplies of water at the roots. Inarching may be performed.

Geraniums, should be cut down towards the latter end of the month, and cuttings put in, where young plants are wanted.

Azaleas will now be growing rapidly, and will need plenty of water.

Cactuses should be carefully watered.

Oxalis Boerhaavia may be potted the latter part of the month for flowering in September.

Carnations may be layered this month.
Orange and Lemon trees may be budded.
Tulips and Hyacinths may still be taken up, and placed in a cool dry place until October.
Mignonette should be sown now for blooming in November.
Brompton Stocks and Wall Flowers should be sown now.
Perennial flower Seeds may still be sown.
Chinese Primrose Seed should now be sown.
Chrysanthemums will require heading down now, in order to make bushy plants.
*Dahlia*s will require attention, cut off all superfluous shoots and stake them where necessary.
Green-house Plants in pots should be attentively watered.

THE CROPS.—In a ride of twenty miles a few days since, in Baltimore county, we regretted to find the wheat generally injured by the *scab* and *rust*—We did not examine the Rye, but were told the crop was generally a failure. Corn is backward, but looks healthy—the Oats crop bidding fair, and the Grasses generally heavy. So far as our observation enables us to speak—and we stooped to examine at least fifty fields of wheat, the Mediterranean wheat has stood best. Our accounts from other parts of Baltimore and the adjacent counties, coincide with our own examination, as above noted. The Oats and Grass crops will be very good, but the Wheat will be materially injured.

The *Marlboro' Gazette* says, that the continued wet weather has materially injured the wheat crop in Prince George's county; the Mediterranean wheat is but slightly injured.

The *Kent News* says that the farmers have commenced cutting their wheat, and that the Mediterranean is much less affected by the Hessian fly, *scab* and *rust*, than other varieties; the later wheat is very much affected by the *scab*; it is thought that the injury by this disease will be greater than has been realized in any year since 1814.

The *Centreville (Queen Anne's co.) Times*, says that the most disheartening accounts are received from all parts of the county, of the injury to the wheat by the *Rust*; some fields will not pay the expense of harvesting. The Mediterranean has generally escaped, though it will only present a fair yield. All the smooth wheats have been injured by the *scab*.

The *Frederick Examiner* says, that there is considerable complaint of *scab* in the wheat in that county, but entertains a hope that it is not as bad as represented. The harvest commenced about the 23d.

The *Hagerstown (Washington co.) News*, thinks the crops of that county have not turned out quite so favorable as was anticipated; there is scarcely a field but what is more or less affected with *scab* or *rust*, some so much so as to be almost worthless.

The last *Lynchburg (Va.) papers* say, that notwithstanding the adverse season, the harvest will be a full average for wheat; and that the Oats and Corn will be very superior, from present indications, if the season continues favorable. The *Richmond papers* say that the recent change in the weather has been very favorable for the uncut wheat.

The ravages of the Hessian fly in N. Jersey, are said to be very great; in the neighborhood of Rahway, the entire wheat crop seems likely to be cut off.

The *Jefferson co. Va. Free Press* says that the

Wheat crop in that region must have sustained serious injury from the almost constant rains they have had for several weeks, and that farmers vary as to whether there will be a half or two-thirds crop made.

A letter to the editor of the *American Farmer* from *Pittsboro', N. C.* says, that the oat and wheat crops promised to be very abundant, but that a constant rain of several days had caused very high freshets, and it was presumed a great loss would be sustained by the grain being thrown down or overflowed. More rain had fallen in one week, than fell the whole of last year put together! Last year, however, was one of unprecedented drought, and but little corn was made.

From Pennsylvania, we learn that the crops of wheat, rye, and grass are equal in abundance to those of any previous year. The wheat, in some places, has been injured, it is true, by the fly, but the extent of this injury, in the aggregate, is comparatively trifling, and of no real consequence. The oats crop never looked better, while the potato and corn crops are as forward as they ever were at the end of June, and indicate bountiful products, should the residue of the summer prove as favorable to them.

WHEAT CROP.—Great complaint has been made of the destruction of the Wheat crop by the Hessian fly, which we know has been considerable. But we believe, from a recent trip to the country, that the crop will be almost entirely destroyed by the rust. The rye is already destroyed, and the May wheat, we hear, is so much affected that it will be destroyed; and unless there is a change in the weather in a few days, to a dry and cool breeze, the whole of the late crop will be destroyed.—*Lynchburg Virginian*.

We have a letter from *Charlotte*, saying that the harvest of the early wheat was just coming on, that the injury from the fly had been wonderfully overcome and that the rust had not yet appeared.—*Richmond Compiler*.

NEAR WESTMINSTER, CARROLL CO. JUNE 24th, 1846.
 To the Editor of the *American Farmer*:

Believing some account of the crops in this section of country may not be uninteresting to your readers, I set down to give you a slight history of the disasters which have befallen the wheat crops. Our prospects this spring were very flattering, and every one anticipated a large yield, but the fears of the least sanguine will fall far short of the sad reality.

The drouth during April affected the crops considerably, but the wet season which followed for a time gave promise of a good season: the excessively wet weather when the wheat was blossoming, injured it very seriously,—since the weather has cleared away, the sun has had a very bad effect on the young and tender grains, almost every head has more or less grains which had been fully impregnated, and going forward rapidly to maturity, which are now shriveling away, apparently blighted. This is not the case with a few fields, but generally throughout the county wherever I have heard from, the same complaints are made. The smoother wheats have been more affected than the bearded varieties. The Mediterranean wheat has suffered less than most other wheat. The *Etrurian* has suffered a good deal also, but not so much with me as the *Blue Stem*. The yield in this county cannot go beyond a half crop, and that will be of indifferent quality.

The corn promises finely,—though a great deal will be injured by grass and weeds, as it has been almost impossible to work it at all since planting, until last week.

S.

ETRURIAN WHEAT.

EASTON, June 18th, 1846.

To the Editor of the American Farmer :

Sir—At page 368, No. 12 of your work, I see you have become the agent for the sale of Etrurian wheat, and strongly recommend it to the Farmers of the U. S.

I purchased four bushels of said wheat from Messrs. B. & Cox, of your city, the last season, and wishing to test its ability to resist the Fly, I had prepared in August, a small lot, turning in a good second growth of clover, the 15th of the month, rolled and harrowed; my absence from home prevented me carrying my intention to seed as early as I wished in to execution; while gone, the clover lay received by my directions, a good top dressing of as fine marl as any on our shore, after spreading which, the surface was again well harrowed to incorporate the marl. After washing in a strong brine and rolling in lime, I commenced seeding the Etrurian wheat, the afternoon of the 24th of September, 1845, and finished the following morning, giving the wheat a covering with seed ploughs, of good earth and marl, then water furrowed and rolled. The whole lot I believe contains about three acres, two marl pits, and a road leading to them may occupy a fourth acre, so that the four bushels of Etrurian wheat was sowed on about 2½ acres. The owner of the lot informed me, that he has cut 80 bushels of wheat from it, or some one of his tenants. In the month of November many of the plants of wheat looked dead, with blades prostrate on the ground; on examination, 12 to 15 fly in different stages, were found in a plant, yet still some life in the extremity of the roots,—which induced me to let it take its chance, after having done my part to make it produce a crop.

An unfortunate accident in the early part of the winter and consequent confinement, prevented me from closely watching the progress of improvement, if any, throughout the season, and this spring a friend examined and brought me in two bunches, one which we supposed had escaped the fly, about 3 feet long, another about six inches, which had suffered, and to use his expression, was making the greatest efforts to recover the attack of the fly he had ever witnessed. Our harvest of Mediterranean and Pig wheat has commenced, my lot of Etrurian is in bunches, not ripe enough to cut, and getting the rust in spots. There are heads of bearded wheat among it, which I take to be Mediterranean, that as well as the Etrurian, has a very large head, and their unusual length induced me to examine their relative produce. The former had I think 64, and the latter 94 grains in three heads.—I send you a sample of each.

I fear I have taxed you too severely with my minute details; my reasons for doing so, are, to put you in full possession of the character of the Etrurian wheat, as far as my experience goes, and you are at full liberty to make such comments as you see proper, as the agent recommending it to the farmer's notice.

There were other four bushels of Etrurian wheat received in this neighborhood in October by a friend, who informed me it was exempt from Fly. I have not had time to examine it.

Very respectfully, your ob't. serv't.

WM. H. TILGHMAN.

PREMIUM WHEAT FANS AND GRAIN CRADLES.

These Implements have been brought to such perfection by J. T. Grant & Co., of New York, that the use of them is no longer considered laborious, (as formerly) but may be used by boys or the weaker hands on a plantation. They will be kept for sale during the harvest season by the subscriber, who is the sole Agent in Baltimore and vicinity.

EZRA WHITMAN, Jr.

No. 36 Light-st.—Baltimore.

May 1

BALTIMORE MARKET, June 30.

Md. Coupons, 77; the settlement of the Oregon question has tended to cause a rise in all kinds of stocks—Coffee, Rio, 7½a8; Cotton, inactive; Feathers, sales at 25a30c. as in quality—Fish, Herrings, dull, at 4a.25—Shad, 56 for trimmed No. 1, Mackerel 10a13 for No. 1.—Flour, Howard-st. has varied from \$3.81 to \$3.87—the first may be considered the fairest quotation for the beginning of the week—receipt price \$3.63—City Mills, firm at 4a.25, for fresh ground; Susquehanna, \$3.87—Rye, 52a75—Corn Meal, Pa. 52a75—Wheat, Pa. reds, 85, Md. wheat is in limited supply, we quote reds 85a88, white 90a105—The first sample of new wheat, from Somerset county, Md. arrived on Saturday, and sold at 102c. being a lot of very prime white suitable for family flour—Corn, white 52a53, Yellow 52—Rye, Pa. 65c. no Md. in market—Oats, Md. dull at 29c.—Hemp, Ky. dew rotted 3-7a4—Molasses, P. Rico, 27a27½—Beef, West. mess, \$9.50, No. 1 \$7.50a7.75; prime 5.50a5.75, dull; Balt. No. 1, \$8a8.25; no sales for mess and prime—Pork, mess, \$11a11.25; prime 8.75a9—Bacon, Western shoulders, 3½a4½, sides 5½a5½, and hams 5½a8 for all grades—Lard, 7a7½c.—Sugar, N. O. 6a6.25; P. Rico 6.50a7.50—Whiskey, in hhds. 21c., bbls. 22c.—Wool, com. to 1½ blood, sales at 22a25; inquiries for fine, but none in market—Cattle, beef, 740 head offered last Monday, of which 440 were sold to the butchers, and 300 remain unsold; prices ranged from \$2.35.50 per 100 lbs. gross, equal to 4a6 75 nett, averaging about \$3 gross; this is a decline from the week before, owing to the large supply, and the greater portion being grass fed.—Hogs, live, abundant, and dull at 4.75a5.

Tobacco, sales last week for Md. were pretty extensive, at former prices, but no improvement has taken place; it is however thought, that the lowest point has been reached—and any change in price, will be for the better—the large quantities of common qualities on hand in this country and Europe, will keep those kinds at low rates, but it is hoped that the diminished production may possibly cause some advance soon—We quote infer. and com. 1.50a2.50, mid. to good 3a3.50; good 6; fine 7a12.—Ohio is in fair demand, and sales to some extent are making, but prices are not steady, and low terms have been been submitted to; we quote com. to mid. 1.50a3.50, good 4.50a6, fine red and wrappery 6.50a9, fine yellow 9a11, and extra wrappery 10a12—Inspections for last month, Maryland, 4992 hhds; Ohio, 4371; Pennsylvania, 17; Kentucky, 125; Va. 25;—Total, 9530 hhds.

Letters from the West state, that in consequence of the low rates of common tobacco, there has been not more than a tenth of the former quantity planted this season, which must have a beneficial effect on the market this fall.

JAMES MURRAY'S CORN & COB CRUSHERS.

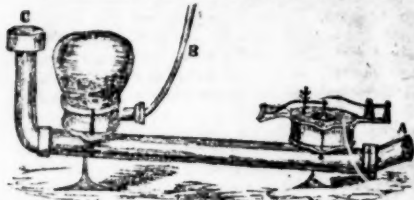
These already celebrated machines have obtained the premium by a fair trial against other crushers exhibited at the fair held at Gaymans-town, Balt. co. Md. in Oct. 1845, and the increased demand enables the patentee to give further inducements to purchasers by fitting an extra pair of grinders to each machine without extra charge. Prices \$25, 30, 45, 40, 45.

Also—Small MILLS, which received a certificate of merit, for \$15—I have also superior CUTTING BOXES, such as will bear inspection by either farmers or mechanics. Also, Horse Powers, Mills, Corn Shellers, Mill and Carry-log Screws, small Steam Engines, Turning Lathes, &c. Also, a second hand Steam Engine, 16 horse power, and the works for 2 Saw Mills.

Any kind of Machine, Model or Mill-work built to order, and all mills planned and erected by me, warranted to operate well. Patent Rights for the Corn and Cob Crusher for sale.

Jy. JAS. MURRAY, Millwright, York near Light-st. Balt.

BENSON'S PATENT WATER RAM.



THE above is a representation of Benson's Patent Water Ram, which has been so highly approved of by farmers and others. Persons having a small branch of water at their command, can have the water of a spring that may be required, forced to the house or barn in a constant stream, winter and summer, without any labor or power than that of a small head of branch water to drive the spring water to the required height, and requires no personal attention; forcing from 25 to 100 barrels of pure water to the house and barn per day. The letter A represents a small section of the driving pipe—B the discharge, and C the spring water pipe. All Rams sold by me or my agents, will be marked B. S. Benson's Patent, August, 1845. The public are cautioned against impostors. My agents will be required to show power of attorney, or receipts signed by me. Persons visiting the city, can see this Ram in operation at the Lumber Yard of Mr. Thomas Matthews, High street, near Low street, where persons can learn the utility of this useful machine. Price for the double runs \$300—single runs for raising a portion of the driving power \$25, with the improved valve. A more minute description of the Ram, with a diagram, may be had by reference to the *American Farmer*, vol. 1, page 311.

(?)—Patent Rights for Counties and States will be disposed of on liberal terms.

(?)—As I have the exclusive right secured to me by letters patent, of using the two waters in contact, in the hydraulic Ram, all persons are cautioned against using the same at the peril of the law. July 1. B. S. BENSON.

DURHAM SHORT-HORNS.

FOR SALE, several young Durham Bulls, from 2 months to 2 years old, of the very best stock in the U. S. The character of the breeder of this stock is a sure guarantee of their purity; they are of the finest kind of Durhams, and are from the best of milkers. The owner having an extensive Dairy, and the demand for the products thereof being great, induces him to part with his young Bulls at very low rates—the Cow calves could scarcely be purchased at any price. The sum of \$300 dollars has been offered within a few weeks for one of the cows, and refused. For further particulars apply to S. SANDS, publisher *American Farmer*.

Also several fine young DEVON BULLS, thorough-bred, about 4 to 5 months old, very fine animals—apply as above. July 1

PLOUGHS! PLOUGHS!!

The subscriber is manufacturing Ploughs of various patterns and of different sizes; also Wheat Fans, Cylindrical Straw Cutters, Corn and Tobacco Cultivators, CORN SHELLERS, &c. Also,

THRASHING MACHINES and HORSE POWERS—these latter are used by the following gentlemen, to whom reference is made, as to their superior value, viz. Messrs. S. Beard, T. Heard, Dr. Watkins, T. J. Hodges, T. Welsh, W. Mackall, J. Glehart, A. Sellman, H. Hopkins, J. Kent, G. R. Gauthier, all of Anne Arundel county; and to Messrs. R. B. Chew, J. V. Earler, W. Bowtell, G. W. Weems, and Z. Howes, of Calvert county, Md. (?)—Those wishing to examine the above articles are invited to call at my establishment in *Gilpin's alley*, entrance from Howard st. 4 doors from Pratt st. Baltimore. July 1

CHAS. H. DRURY.

HORSE-POWERS and THRASHING MACHINES.—The Subscriber has on hand six Horse-Powers and Thrashing Machines, which he will sell very low, as he wants the room they occupy; they will be warranted to be equal to any machines for the same purpose in use—the Horse-powers are so constructed as to give any speed desired, from one to fifteen hundred.—He also has on hand a good stock of Ploughs and Plough-castings, on accommodating terms, at wholesale and retail,—also, Cultivators, Harrows, his Patent Cylindrical Straw-Cutters, &c. &c. J. S. EASTMAN, May 1 No. 108 Pratt st.—Baltimore.

PITTS' PREMIUM CORN AND COB MILL, which received the highest premium at the New York State air, last September—Just received, and for sale by the subscriber at his Warehouse, No. 55 Light-st.—Baltimore. May 1 EZRA WHITMAN, Jr.

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